# Review of the Regulatory Structure and Scope of Practice for California's Dental Auxiliaries

Submitted to:

The California Department of Consumer Affairs

California Legislature

Joint Legislative Sunset Review Committee

**September 1, 2002**

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# Table of Contents

# Executive Summary

One of the major themes reported in the Surgeon General's 2000 report of "Oral Health in America," is that "oral health is integral to general health. You cannot be healthy without oral health." While the linkages of oral health to the nation's general overall health and well-being are more recent, nearly 30 years ago the Legislature recognized California's challenge to "meet the dental care needs of all the State's citizens" and enacted legislation relative to dental auxiliaries. Through the six categories of dental auxiliaries, dentists enhance their abilities to provide services to their patients. In fact, the Surgeon General reports that the dental health of most Americans has improved over the past several decades and that most middle-aged and younger individuals can expect to retain their natural teeth over their lifetime and not expect to have any serious oral health problems. Despite these gains, leaders stress the importance of optimal oral health cannot be understated and that the nation needs to not only meet the needs but to strive to provide care for all Americans.

However, the Surgeon General's report also discloses that the dentist-to-population ratio is declining and that an estimated 25 million individuals reside in areas lacking adequate dental care services. Statistics from the Committee on Dental Auxiliaries (COMDA) indicate that over the past five years the number of registered dental assistant (RDA) and registered dental hygienist (RDH) licensees has increased slightly more than 10 percent, and the California Dental Board reports the number of dentists licensed in the State has increased by 4.5 percent during that time. Approximately 29,400 dentists hold licenses in the state and the California Dental Board issues about 1,000 new licenses each year. State demographic statistics reflect a 7 percent population increase since 1997. These statistics, however, paint a much different picture when translated into service delivery numbers—California's 2001 population is nearly 34.8 million or 1 dentist for every 1,183 residents and 1 registered dental hygienist (RDH) per 2,374 people.

Clearly our state and our nation are challenged to meet the dental health care demands of our population. COMDA seeks to contribute to meeting the dental care needs of California by fully utilizing auxiliaries, stating "Full utilization of auxiliaries is realized when all possible duties are delegated to auxiliaries, consistent with the protection of public health and safety, so that services are accessible to as many Californians as possible." However, over the three decades since the enactment of the legislation, dental auxiliary regulatory structure has proven to be rigid and restrictive. Regulations reflect the scope of practice for each category with the duty and tasks narrowly defined and inflexible and the COMDA and California Dental Board regulatory processes in place to address emerging practice demands and technologies have been cumbersome and unresponsive. Under the current legal and regulatory structure, we find that dental auxiliaries and the dentists they assist cannot fully utilize the knowledge, skills and abilities that they have been trained, educated, and are competent to provide. Thus, skills and capabilities developed by these individuals are not fully leveraged to best meet the demand for dental care.

Moreover, the State has heretofore foregone critical public dental health care provider resources through its inability to implement the 1998 provisions for Registered Dental Hygienists in Alternative Practice (RDHAP). This auxiliary category is specifically intended to provide preventive oral health care to underserved populations—residents who are homebound, in schools, residential facilities and other institutions, or areas designated as "dental health professional shortage areas"—without the supervision of a dentist. Populations meeting these definitions are often poor and have no dental insurance; it is in these populations where the Surgeon General found "striking disparities in dental disease by income." By not facilitating the infrastructure to provide the required education for registered dental hygienists to become licensed to work in "alternative practice," the state lost opportunities to increase the capacity of the dental health care network with RDHAPs.

The Legislature also intended that dental auxiliary classifications would facilitate "career ladder" opportunities. While COMDA is committed to providing a "viable career ladder" for its licensees, opportunities for professional growth and career movement are constrained. In reality, the evolution of practice and the underlying training and educational programs suggest that the auxiliary categories are not linear; whereas dental assisting is characterized most often in terms of restorative dental care, the practice of dental hygiene is primary care for preventive and prophylactic services. We see two career paths potentially offering advancement—complementary and parallel—rather than a single path comprising an occupational continuum.

Therefore, to align the scope of practice and the regulatory structure for each auxiliary category with the Legislature's intent, and to meet the demands of dentistry's changing technology, market economics, workforce dynamics, and the public and private health care needs of California's growing population, several significant changes are warranted. Our recommendations include the following:

- Establishing the scope of practice for dental auxiliaries in code. Delineate occupational definitions and practice parameters in terms of position, responsibilities, and services rather than the current regulatory approach specifying finite tasks and duties. Set practice boundaries by establishing prohibited duties and responsibilities.
- Revising supervision standards to afford licensed dentists wider discretion to assess the knowledge, skills, and abilities of each auxiliary member employed and deploy their services in a manner consistent with regulation, as appropriate, and in the best interests of the patient.
- Requiring non-credentialed dental assistants to complete basic coursework in infection control and patient safety.
- Broadening the scope of practice for the Registered Dental Assistant (RDA) by establishing a more "non-permissive" or open structure. Allow the dentist to delegate and set the supervision level for each activity based upon his or her assessment of the knowledge and competency of the RDA.

- Establishing modularized certification courses for RDAs that lead to RDAEF licensure, or allow the individual to perform specific advanced tasks or attain additional competency in a specialty area, such as orthodontics.
- Revisiting the requirements that RDAEF programs be offered only at dental schools and allowing programs to be provided at community colleges, through extension programs, proprietary dental assisting or hygiene schools, or other appropriate educational institutions.
- Expanding the scope of practice for RDAEFs to include amalgam and composite restorations.
- Allowing dentists to obtain waivers from the restriction of employing a maximum of two RDAEFs.
- Broadening the scope of practice for RDHs by establishing an open regulatory structure and allowing dentists the discretion to determine the level of supervision appropriate.
- Revisiting the relevance of the expanded function RDH.
- Fully implementing the laws establishing the "alternative practice" RDH by facilitating the development and availability of educational programs for licensure.
- Establishing provisions that would allow an "agent" relationship between RDHAPs and their supervising dentist to mitigate barriers related to prescription and patient of record issues in public health delivery settings.
- Allowing RDHAPs to supervise, in a limited capacity, RDAs and RDAEFs in the public health arena.

# Introduction

When the Legislature enacted Government Code Sections 1740 Et. Seq. within the Dental Practice Act, it's stated intent was for the full utilization of dental auxiliaries to meet California's dental care needs. Further, the intent was for the classifications of dental auxiliaries established pursuant to the article to constitute a career ladder to facilitate advancement of the licensees through additional training. Over the ensuing 30 years since the enactment of the legislation, the resulting regulatory structure related to dental auxiliaries has proven to be rigid and restrictive. Moreover, the regulatory processes through the California Dental Board and its Committee on Dental Auxiliaries have been cumbersome and unresponsive in meeting the challenges of rapidly changing technology and the demands emerging in the dental profession. As a result, dental auxiliaries and the dentists they assist cannot fully utilize the knowledge, skills and abilities that they have been trained, educated, and are competent to provide. Thus, skills and capabilities developed by these individuals are not fully leveraged to best meet the demand for dental care.

Moreover, although the provisions of Section 1740 prescribe that the intent of the auxiliary classifications are to facilitate "career ladder" opportunities, under current regulations, the continued advancement and development progression of dental auxiliary licensees are either constrained or essentially unavailable. The evolution of practice and the underlying training and educational programs do not suggest that the auxiliary categories are linear; for example, whereas dental assisting is characterized most often in terms of restorative dental care, the practice of dental hygiene is considered primary care for preventive, therapeutic, and prophylactic services. Thus, the resulting career paths are more complementary and parallel than comprising a continuum for career advancement.

The legislative intent relative to regulating dental auxiliaries cannot be viewed simply in terms of licensure and oversight. Certainly the underlying objective of profession regulation is to assure that practioners, in this instance dental auxiliary members, are qualified and competent to safely provide services to the public. But, as the COMDA core principles assert, the regulation over the occupations must also afford "access to quality dental care to preserve and restore" health, and also state that "full utilization of dental auxiliaries significantly assist in increasing access to quality dental care." Studies suggest that California and the nation are experiencing an oral health care crisis. Reports indicate that poor dental health has many personal and economic consequences including lost school days, educational underachievement, lower self esteem, reduced productivity, and as well as directly linked to other chronic illnesses.

Mindful of the original intent of dental auxiliaries, it is also important to consider the implications of regulations in terms of barriers to care—in providing services in private practice settings and, particularly, in meeting the needs of the undersevered and vulnerable groups who may likely only obtain care in the public health arena. As such, regulatory processes and rules must permit reasonable entry into the dental health occupations, establish appropriate criteria for and access to education and training, and build capacity to address the dental health care needs of all Californians.

Therefore, the scope of practice and the regulatory structure for each auxiliary category must be aligned with the Legislature's intent, to meet the demands of dentistry's changing technology, market economics, and workforce dynamics, and to increase opportunities and capabilities to meet the growing needs of California's population.

## Developing a Timeless Regulatory Structure

The California regulatory structure related to professions and paraprofessional occupations varies. In some cases the scope of practice is delineated within the statutes and the regulations provide the framework for governance, education, licensure, discipline, enforcement, and other regulatory matters. In other instances, such as dental auxiliaries, the code provides only the basic definitions and licensure requirements and defers to the California Dental Board the development of occupational definitions, scope of practice parameters, educational requirements and examination provisions, and licensing methods, as well as continuing education requirements and disciplinary processes and enforcement.

An optimal regulatory structure would protect and promote public safety and well-being while facilitating a licensed dentist's discretion to deploy operational, technological, and therapeutic advancements, and leverage the competencies, education, and skills of the dental auxiliary team. Thus, we believe the most effective strategy is to delineate occupational definitions and practice parameters in terms of position, responsibilities, and services in statute rather than finite tasks and duties in regulation; thereby accommodating flexibility in techniques and tools, as well as allowing appropriate discretion to delegate duties. To appropriately protect the public and delineate practice parameters and boundaries, statutes for each auxiliary category would specifically include prohibited functions and activities. The breadth of scope and level of flexibility afforded in the occupational definitions should be commensurate with the level of education and training; thus the fewer minimum qualifications required for delivering services in the category, the more prescriptive and limited the scope of practice should be.

The essential underlying premise in the regulatory framework, regardless of the category of licensure, is the protection of the public's health and safety. While the State can set minimum qualifications and competency standards for individuals working the dental care occupations, the ultimate protection remains with each dental auxiliary member, and with the employing licensed dentist who is legally charged to assess the abilities of each individual supervised and delegate only those duties and tasks appropriate to the individual's skill, education, knowledge, and capability.

In July 2002, Sjoberg Evashenk Consulting prepared a draft report conveying our findings and recommendations of the issues related to dental auxiliaries including the regulatory structure, educational requirements, scope of practice, career entry and progression, and implications related to delivering dental health care in California. In compliance with our agreement with the State, we publicly disclosed our draft and held an informational meeting to obtain input and feedback from individuals, stakeholder groups, advocates, the state, and others. Additionally, we identified and conducted in-depth case studies of eight states showing some provisions that could reflect alternative regulatory structures or provisions.

We found that several of our case study states have more open approaches to regulating dental auxiliaries including a few with only minimum provisions addressing dental assisting, some having practice-related regulations as opposed to duty-specific, and others afford dentists wide discretion in directing the activities of the dental auxiliary personnel. The individual case studies are presented in the appendix.

In finalizing this report, we considered the written and verbal information and views offered during the public input and exposure process, additional research, and the provisions that we identified not only in our eight case studies but also during our extensive review of the other 42 states. We have made modifications to our report as appropriate.

## Background, Scope, and Methodology

In April 2002, the Department of Consumer Affairs in compliance with Senate Bill 26 (Chapter 615, Statutes of 2001) contracted with Sjoberg Evashenk Consulting, LLC, to conduct an independent assessment of the issues related to the scope of practice and related regulation of the occupations defined as dental auxiliaries. The study was to provide unbiased and objective information to the department, the Legislature, and its Joint Legislative Sunset Review Committee (JLSRC) to assist in decision making processes.

Over the past five years, many issues related to regulation and scope of practice for dental auxiliaries have come before the Committee on Dental Auxiliaries (COMDA). To explore and address many of these important issues, COMDA agreed to form a task force in August 1999, that included members from each auxiliary and dentist community. During the ensuing two years the task force met on numerous occasions to deliberate various regulatory and practice issues. In October 2000, in compliance with a legislative mandate, COMDA submitted its Sunset Review Report to the JLSRC. The sunset report, in addition to program and administrative statistics and operational information, also addressed COMDA actions, activities, and unresolved matters related to various regulatory issues and recommendations made by the JLSRC in April 1997.

In response to the report and the ongoing deliberations of the task force, several individual stakeholders and occupational groups submitted formal reports to the JLSRC conveying supportive and dissenting positions and surfacing other matters for consideration. To obtain insight from a third-party reviewer, in January 2002, the Department of Consumer Affairs solicited proposals from independent consultants with the stated purpose to:

> *"Identify duties in each category of dental auxiliaries that should be allowed to perform consistent with the appropriate protection of the public health and safety and the amount and type of training/education, in broad terms which each auxiliary should be required to successfully complete prior to performing each duty.*
>
> *Identify the type of supervision by a dentist or other health care provider during the performance of each duty."*

To accomplish this purpose the contractor was charged with conducting research, analysis, and other tasks resulting in a report recommending changes to existing statutes and/or regulations related to California dental auxiliaries and how these changes may affect the health, safety and welfare of the public.

In conducting our dental auxiliary study we reviewed relevant laws, rules, and regulations; obtained and reviewed occupational analyses, studies, position papers, and other related reports; and studied COMDA notes, reports, memoranda, minutes, etc., involved with the sunset reviews, committee meetings, and task force meetings. We

identified duties performed by each auxiliary, including those allowed and articulated under current regulation and sought to identify any that are customarily performed but not delineated. We prepared a matrix for each category of auxiliary illustrating the duties, responsibilities, supervision level, educational requirements, and examination process specified by law and regulation. Through documentary review, report review, and interview processes we compared the existing educational requirements with the current duties and responsibilities of each category of auxiliary.

Through a series of in-depth interviews with representatives from each of the auxiliary categories, professional organizations, advocates, and interested parties, we obtained their views and input of the current scope of practice and regulatory structure of the various categories of dental auxiliaries and the challenges, barriers, opportunities, and issues currently facing each group. We also interviewed individuals representing national organizations and obtained research and information from a variety of industry sources.

To determine whether the regulation of other health care professions may offer potential opportunities for an alternative regulatory model, we conducted empirical research to ascertain primary elements of regulation employed by other health care fields.

In addition to California's regulatory structure, we gathered and analyzed the laws rules and regulations of all 50 states related to the regulation and scope of practice of dental auxiliaries and conducted in-depth case studies of eight states. We compared a variety of regulatory structures and scopes of practice allowed by other states such as "open" and "closed;" "permissive" and "non-permissive;" and states that employ a mix of the approaches. Through research, analysis, and interviews, we developed case studies for several of the states with structures different from California. To determine issues related to public health and access to dental care, we conducted interviews with appropriate parties and obtained research, articles, and reports on health and dental care issues.

Further, we exposed our draft report and findings publicly to obtain input and feedback. Specifically, the Department of Consumer Affairs and COMDA posted our report draft on their respective websites for public review. Also posted on these websites was a public announcement to attend an informational meeting in Sacramento facilitated by Sjoberg Evashenk and also inviting non-attendees to provide comments on the report either in writing by mail, facsimile, or email, or orally by telephone. We also obtained the COMDA and the California Dental Board's listings of interested parties and sent by mail over 750 formal announcements of the informational meeting and the availability of the report draft. As a result of these efforts, over 40 people attended the informational meeting where 13 provided formal testimony. Additionally, we received a number of letters, emails, and telephone calls from other interested parties addressing issues in the draft.

# Dental Assisting

Over the past three decades, dental assistants have become integral members of the dental practice team. While the value and importance of the dental assistant is indisputable, much discussion surrounds issues related to the scope of practice, levels of education, and registration of these individuals. Traditionally, dental assistants assured the comfort of patients, sterilized and disinfected instruments and equipment, and worked chairside as dentists examined and treated patients. While these duties remain foremost in an assistant's responsibilities, the discipline of dental assisting has evolved to focus on broader issues, such as general dentistry, restorative dentistry, orthodontics, periodontics, and oral surgery.

Dental assisting, as practiced in California, comprises a progressive path of service delivery that is dependent on competency, education, and training. The occupation of dental assisting may be characterized as follows.

> ***Dental assisting:*** *Providing primary chairside support to the licensed dentist. Typically responsible for ensuring the patient's comfort, obtaining and documenting medical history, delivering and ensuring office infection controls, performing other extra-oral activities, and intra-oral restorative and specialized activities commensurate with the competencies, education, and training of the individual.*

The practice boundaries, type of regulation, supervision levels, and educational requirements related to dental assisting vary widely nationwide. Our review of state regulatory structures shows that some states license dental assistants while others are essentially silent or non-specific to the category. Specifically, some states have no explicit regulation over dental assisting; rather the boundaries that would relate to dental assisting reside within the practice laws and regulations for dentists and provide the types and nature of activities that dentists are allowed to delegate or supervise. Alternatively, many states clearly address the occupation but regulate it in a variety of ways—some establish very prescriptive scopes of practice that may be closed or termed "permissive" (allowed to perform only those tasks delineated or permitted) while others afford very open or "non-permissive" (may conduct reasonable tasks of the occupation as long as the duty is not prohibited) structures.

Our research suggests that the regulation of oral health care among states runs from highly prescriptive to establishing only the minimum standards for the occupations. We found that some states maintain that proof of public harm is a prerequisite to regulation. Our view of California's approach to oral health care oversight appears on the more prescriptive side of the spectrum and has been characterized as seeking to protect the public prior to the occurrence of harm. Additionally, in our experience, we have seen that the legislative process is sensitive to the construction of undue barriers that could inhibit occupational entry or access to care. In considering the future framework for California's oral health care professions, the State has the opportunity to again lead the

country in regulatory innovation by establishing a structure focused on competency, adaptability, and public interest.

## Dental Assistant

The dental assistant category is an entry-level position that requires no prior knowledge, experience, or training in any aspect of dentistry or other unaffiliated profession. As such, traditionally the candidate is trained on-the-job to perform a variety of extra-oral duties including sterilization and disinfection of instruments and equipment, patient data gathering, and front-office duties, and they also perform basic chairside supportive functions including intra-oral procedures. Normally, extra-oral procedures may be conducted under general supervision while the dentist must directly supervise most intra-oral activities. Because California does not require the registration or licensure of dental assistants, the number of individuals working in the state in this capacity is unknown.

There are varying perspectives and rationale related to regulating or not regulating dental assistants. Some states closely regulate the practice while others establish only minimal criteria. The rationale we heard most often for not regulating dental assisting asserts that because the licensed dentist employing the dental assistant is fully responsible and liable for their conduct, that many activities must be performed under direct dentist or hygienist supervision, and the fact that intra-oral duties are limited by regulation, the public is adequately protected and regulation is unwarranted. When compared to other states, California is more restrictive in some cases and comparable with others. Some California stakeholders maintain that the dentist should be afforded much more latitude in delegating duties to non-regulated dental assistants while others believe that allowing too much flexibility without any educational or training requirements presents an unreasonable risk to patients and other office team members.

**Regulation and Scope of Practice**

The Department of Consumer Affairs commented in response to the Sunset Review of the Committee on Dental Auxiliaries that "Dental care at all levels affects the health and safety of Californians and requires a high level of skill." Thus, the department concurred with the sunset review recommendations for continued regulation of dental auxiliaries. While we would agree in concept that law and regulation should afford flexibility to the dentist to delegate duties to the non-credentialed dental assistant as the individual demonstrates the skills and competency in those tasks, we believe that persons performing more than just the primary level of intraoral activities should be required to attain and demonstrate competency to a uniform standard set by the state. Additionally, in our opinion, we believe that the public perceives an implied assurance that anyone performing intra-oral duties possesses a minimum of formal education as well as clinical training.

Considering the importance to maintain ease of entry into the profession, and recognizing the recent reduction of work experience required to be licensed as a registered dental assistant (RDA), we believe it appropriate to retain the existing prescriptive and relatively closed scope of practice for dental assistants. We agree that the dental assisting occupation should allow an appropriate career progression and opportunities to learn and

do more as one becomes more experienced and competent. However, more advanced and potentially harmful procedures warrant not only clinical technique and skill but should also be accompanied by the underlying knowledge base that is obtained through formal educational methods.

**Minimum Training Requirements**

During our national research related to dental auxiliary regulation, we found several states' continuing education requirements specify periodic training related to infection control. Additionally, many require most if not all of the oral health care "team" members to have up-to-date CPR certifications. If dental assistants are to be considered as key members of the dental office provider team, then it is reasonable to require that dental assistants (and other auxiliaries) obtain formal training related to infection control, and workplace and patient safety. We believe this is particularly pertinent as the dental assistant customarily is responsible for performing the duties related to maintaining a healthy and safe environment within the dental office—sterilization, disinfecting, and maintaining the integrity of the sanitary environment in the operatories.

As such, we believe that it is in the best interest of the public that the individual with these responsibilities should not only receive on-the-job training in the armamentarium of infection control and public safety but also undertake a minimum of formal coursework that confirms the understanding of the reasons behind the processes, and the risks and implications of mistakes. The state currently recognizes the importance of infection control in the oral health care environment. In fact, 14 percent of the questions included in the RDA examination tests candidates of their knowledge of the topic. Similarly, the examination given nationally by Dental Assisting National Board emphasizes testing the competency of candidates in infection control.

Given the risk to the individual dental assistant, patient, and other dental team staff of improper performance of infection control tasks, we recommend that California adopt provisions requiring a dental assistant to successfully pass a board-approved infection control and patient safety course. The required content of the course should include the basics of Occupational Safety and Health Administration's regulations concerning bloodborne pathogens, patient protection, and dental office emergencies. While requiring this training at the beginning of employment is ideal, reason suggests allowing a minimum employment probation period prior to attaining this outside training. We believe regulations should require the successful completion of a formal course or providing to the employing dentist evidence of such course attendance within 120 days of employment as a dental assistant, in addition to the on-the-job training provided by the supervising dentist. These courses are already required for other auxiliary members; as such, many offerings are currently available.

## Enforcement

The supervising dentist, as the employer, is charged with ensuring that the non-credentialed dental assistant is working within the allowable scope of practice for that auxiliary. The dentist is also charged with ensuring the individual is aware of and understands the legal parameters of the dental assisting profession. More importantly, the dental assistant is responsible for performing duties that are lawful and ethical. Additionally, the accountability for ensuring that the dental assistant meets the infection control course work requirements should reside with both the individual and the employing dentist. Documentary evidence of successful completion of the course should be maintained in the dental assistant's personnel records. While the rules vary nationwide related to the frequency that dental professionals should attend infection control and patient safety classes, California's dental assistants should be required to complete the formal coursework at least one time to meet this obligation.

## The Changing Nature of Radiographic and Other "Imaging"

The Business and Professions Code also mandates anyone operating radiographic equipment in a dentist's office shall meet prescribed course or examination requirements. This provision should also remain. It is important to note, however, that allowable activities specified for all dental auxiliary categories do not address other imaging processes. Although we found that the code provisions related to "radiographic equipment" are generally interpreted in practice to include "any" imaging equipment employed in the dentist's office, as technology presents other options that may not use radiographic processes, technically the dental assistant (or other auxiliary member) may be prevented from operating that equipment (despite specific training on that device). Moreover, because the dental auxiliary wants to conform with regulation by being "certified," she or he may be placed in the situation of obtaining a radiographic certification even if that technology is not in use in their office. Therefore, we recommend that current language be amended for dental assistants (and other affected auxiliaries) to continue to require certification for radiographic equipment—as appropriate—but to allow the dentist to delegate other imaging activities to the dental auxiliary provided that the technology employed is not considered a health hazard.

## Registered Dental Assistant

A Registered Dental Assistant (RDA) performs all of the duties included in the scope of practice for the dental assistant, but also by regulation may be delegated additional duties related to general dentistry, restorative dentistry, orthodontics, periodontics, and oral surgery. In March 2002, the Committee on Dental Auxiliaries reported that 30,075 RDAs held licenses in California—it is not known how many of these individuals are currently practicing.

As the on-the-job trained dental assistant is one mode of entry into the dentistry field, a second point of entry is through education and examination. One may become a RDA by graduating from a board-approved educational program in dental assisting and successfully completing a written and practical examination. Although "dental assistants" are not required to become RDAs, their scope of practice remains limited without the formal demonstration to the Board of competency, education, and training, and receipt of the certification. Thus, multiple incentives come into play to complete the RDA certification; the credential affords: a broader scope of practice; recognition of attaining an established threshold level of education and competency within the field; attaining a "second step" in career progression; and, increased value to the employing dentist that may translated to higher salaries for the RDA. Recent regulatory changes further facilitate the career progression of a dental assistant to the RDA status by reducing the number of months from 18 to 12 equivalent work experience as a dental assistant in lieu of the formal educational component. However, regardless of the path of entry, an individual must still successfully pass both the written and practical board-approved RDA examination to be licensed in California.

### Regulation and Scope of Practice

We agree with the Department of Consumer Affairs' comment to the COMDA Sunset Review that the current structure for dental auxiliaries does not allow sufficient flexibility to train and learn new activities appropriate for the auxiliary category. Our review indicates that RDAs could enhance dental practices through fully leveraging their skills and competencies. RDAs have proven ability to perform a broad range of assisting duties and as such are prepared to undertake a variety of tasks delegated and directed by the dentist. Under the current prescriptive and defined regulatory structure, the authority of the dentist to delegate these tasks is significantly limited. A more open scope of practice would afford far more flexibility to the supervising dentist without compromising the health and safety of the public.

Existing law charges the dentist with assessing the knowledge, skills, and abilities of his or her auxiliaries. As such, the activities of each RDA or other auxiliary member employed are subject to the assessment and discretion of the dentist; therefore, obtaining licensure as a RDA in itself is not permission to conduct all tasks within the practice boundaries. By defining the scope of practice for the RDA to encompass the broad definitions of dental assisting, the dentist is afforded wide discretion to delegate

appropriate activities to a RDA solely based upon his or her assessment of skills and abilities.

Other benefits of a more open scope of practice for RDAs include the likelihood of improved office productivity; quality care from adequately educated, trained, skilled individuals; maximization of RDA skills and abilities; increased utilization of RDA and dentist services both in private practice and in public health care arenas; improved RDA career satisfaction and enhancement; and, a reduction in activities unlawfully being conducted outside the scope of practice.

The scope of practice for RDAs could be defined in a variety of ways. For example, the definition could be conveyed in a general practice description and a delineation of prohibited tasks and duties, such as:

> *In addition to conducting all duties prescribed for the dental assistant, a dentist may delegate to a registered dental assistant, under supervision, reversible (or remediable) intra-oral procedures and activities commensurate with the individual's knowledge, competency, and skill as assessed by the dentist.*
>
> *A registered dental assistant may not perform the following functions or any other activity that requires the knowledge, skill, and training of a licensed dentist*.
>
> - *Diagnosis and treatment planning*
> - *Surgical or cutting procedures on hard or soft tissue, with the exception of etchants*
> - *Procedures that will contribute to or result in irremediable alteration of the oral anatomy*
> - *Fitting and adjusting of permanent correctional and prosthodontic appliances*
> - *Prescription of medicines*
> - *Placement, condensation, carving or removal of permanent restoration, including final cementation procedures, with the exception of RDAs obtaining certification to perform these functions*
> - *Reaming, filing or filling of root canals*
> - *Administration of injectable and/or general anesthesia*
> - *Approve the final occlusion*
> - *Perform pulp capping, pulpotomy, and other endodontic procedures*
> - *Procedures constituted as the practice of dental hygiene with the exception of coronal polishing and the application of fluoride treatments*

- *Procedures delineated for Registered Dental Assistants in Extended Functions unless specifically certified to perform the procedure*

Under this model, future RDA licensure program coursework and the examination process should specifically include tasks such as coronal polishing and applying pit and fissure sealants—thus eliminating any need for specific certification to perform those duties. Currently, not all RDAs hold certifications for these activities; should our recommendations relative to the RDA category be adopted, the Board will need to consider whether license renewal for these individuals would require obtaining specific certification in these tasks.

As discussed in detail in the following section, Registered Dental Assistants in Expanded Functions (RDAEF), we believe that certain activities outside the scope of practice for RDAs should be individually certified. Some states offer such specialty certifications that allow RDAs personal development and occupational progression within their occupation. Moreover, the concept is that these specialty certifications would be obtained either en route to attaining the RDAEF license or would allow a RDA to provide advanced services in a specialty area such as orthodontics or oral surgery. The Board would then need to adopt educational standards for each of these specialty areas.

**Level of Supervision**

Current regulation defines the levels of supervision for RDAs. As the dentist's extra set of hands, close assistant, and facilitator, defining the appropriate level of supervision appears to be best determined by the dentist. Each RDA will bring different levels of competency and skill to the office depending upon experience, background, intellect, and capability. Having demonstrated the minimum standard of knowledge and skills through the licensure process, the dentist is then in the best position to determine which duties and tasks would be delegated to each individual RDA under his or her employ. As such, the dentist is ultimately responsible for ensuring the quality and safety of work performed.

Providing a structure that ensures sufficient patient protection without creating unnecessary restrictions should be the goal in regulating RDAs. For example, the supervision standard could be established as simply as:

> *"The level of supervision for each RDA should be determined by the dentist based upon the deliberative and ongoing assessments of the individual's knowledge, skills, and abilities."*

**Education**

Educational requirements for licensure as a RDA have been established and periodically reviewed and validated. With a broadening of allowable functions for the RDA, the COMDA, and the California Dental Board in consultation with educators should reassess

the required curriculum and clinical teaching to ensure that all related subjects are included in the registered dental assistant programs. Similarly, the written and practical examination should be reviewed to ensure relevancy and appropriate comprehensiveness.

As mentioned above, specialty certifications will require encapsulated courses to include didactic and clinical coursework to assure competency in the area. Course criteria should be set by COMDA and approved by the California Dental Board. For most if not all of these specialty certifications, course completion should include passing both written and practical examinations given by the educational institution.

**Enforcement**

The California Dental Board is charged with enforcing the laws and regulations related to the activities of dental auxiliaries. Individuals licensed by the State are bound by ethics and practice regulation to work within their scope of duties, provide competent care, and protect the patient's well-being. Our proposal for the RDA would not impact enforcement of the practice. However, RDAs attaining a specialty certification should be required to both formally submit the certification to COMDA and also to the employing dentist to be maintained in their personnel file.

The California Dental Board holds the regulatory enforcement authority over all dental auxiliaries. As part of their inspection and investigation functions, board staff conduct site visits to dental facilities. We propose that during these examinations and investigations staff could also review files and activities of dental auxiliaries to ensure compliance with the law. Additionally, the dentist is responsible for all activities undertaken by all of his or her employees and is thus the ultimate enforcement mechanism and should be held accountable for ensuring dental staff work in compliance with laws and regulations.

**Implications of the Proposed Changes**

We expect the changes to the RDA scope of practice will result in minor costs but should provide tangible benefits. COMDA will likely incur some costs related to reviewing the existing curriculum requirements for the RDA in terms of the broadened scope of practice to ensure that the programs will appropriately include all necessary knowledge and clinical components for competency at this level. Moreover, the related written and practical examinations will likely require revision. However, these types of reviews are already a COMDA responsibility, and are conducted periodically as a part of the current regulatory structure. Similarly, the educational institutions providing RDA programs will need to adjust their curriculums to ensure compliance with the COMDA provisions.

In regards to specialty certifications, the Board already oversees similar programs. While COMDA will incur some costs in developing the coursework requirements for the certifications, it would also need to do so to implement our recommended additional

functions for the RDAEF category. The specialty practice certifications for areas such as orthodontics and oral surgery should be included as optional components of the RDAEF certification. As such, COMDA efforts to facilitate specialty certifications will benefit both the RDA and the RDAEF categories.

In terms of further benefits, the expanded scope of practice for RDAs should allow dentists both in private practice and working in public health environments to realize greater opportunities to fully optimize their own skills and abilities as well as maximize the knowledge, skills, and abilities of RDAs. By delegating more duties than currently allowable and leveraging abilities, the result should be increased productivity; greater dental team patient contact; attraction and retention of highly skilled, competent dental auxiliary staff; and greater job opportunity and satisfaction for all dental professionals.

## Registered Dental Assistant in Extended Functions

A dental assistant category pertaining to extended functions is found in several states. As expected, the breadth of duties varies from state to state. In adopting the "Extended Function" category for the RDA, the Legislature sought full utilization of the auxiliary and to provide a career ladder for these individuals in the chosen field. In March 2002, there were 764 Registered Dental Assistants in Extended Functions (RDAEF) licensed in California.

The expanded function classifications were conceived as a potentially cost beneficial means of diversifying the auxiliary workforce and increasing the oral health care system's capability to provide patients with restorative services without compromising the quality of care. By "expanding" the practice area of the RDA, the auxiliary member may be delegated advanced duties, thus generating additional capacity within the office and allowing the dentist to concentrate on those activities that require the depth of knowledge and skill of the dentist. With a broadened scope of practice for the RDA designation, those choosing to go forth to achieve an extended function classification will be afforded increased opportunity to fully utilize their knowledge, training, and skills. However, to facilitate entry into the classification and to optimally utilize the auxiliary member will require some regulatory changes and a further expansion of the RDAEF.

**Regulation and Scope of Practice**

The current permissive scope of practice for the RDAEF is narrowly defined and does not include some of the more beneficial duties that could enhance their value to the dental practice. Several states allow extended function assistants to perform specified, more advanced duties provided that the individual is properly trained and the dentist delegates the function. In particular, as previously allowed under specific expanded function pilot programs in California, the placing, condensing, and carving amalgam restorations and placing and finishing composite restorations appear to be appropriate and reasonable expansions of a RDAEF's scope of practice.

Including such functions would appropriately require specific education and training, but would, when included with the other allowable functions of the RDAEF, achieve a significant expansion of knowledge and abilities for the RDA. By adding these activities and increasing the knowledge and skills base of the auxiliary member, dentists choosing to delegate these tasks to their RDAEFs should realize tangible value in their practices—both in the private and public health areas—such as increased productivity and improved efficiency. Additionally, these processes are deemed more satisfying to the dental auxiliaries choosing to engage in continued learning and professional development.

We recommend that in addition to the existing scope of practice for the RDAEF, the practice be expanded to include, at a minimum, the following:

- *Placing and condensing amalgam restorations*
- *Carving and contouring of amalgam restorations*
- *Placing and finishing composite resin restorations*
- *Sizing, fitting, adjusting, and cementing stainless steel crowns*

In June 2001, the American Dental Association issued, "2000 Survey of Legal Provisions for Delegating Intraoral Functions to Chairside Assistants and Hygienists." The results of the survey convey the following statistics:

- 5 states specifically allow chairside assistants to place and condense amalgam restorations and an additional 3 states do not specifically list the function but provide for the activity under direct supervision.
- 3 states specifically provide for assistants to carve amalgam restorations with an additional 3 having non-listed permission.
- Permission to place and finish composite resin restoration is specified in 3 states and not specifically allowed in 2 others.

**Education and Program Barriers**

The current configuration and implementation of the RDAEF classification has effectively built significant barriers to entry into this field. Only two locations—University of California, Los Angeles and University of California, San Francisco—have developed the educational and clinical programs required to meet the Board's regulatory provisions. The requirement, "clinical training shall be given at a dental school or facility which has a written contract of affiliation for such training with a dental school. An extension program of a university shall not be considered a dental school" has vastly restricted the facilities eligible to deliver the programs needed to qualify, particularly the provision disallowing a university extension program.

As a result, having only two programs statewide presents significant obstacles. These limited offerings present considerable and undue geographic burdens on candidates who may not live in the vicinity of either of the approved schools. With the 90-hour program requirement, candidates must make multiple trips to the campus to attend the program.

The existing program model also burdens the dentist; a dentist must sponsor the candidate and attend many of the sessions. For example, the UCLA program also requires the dentist to attend an affiliated course and find an appropriate substitute dentist if the sponsoring dentist cannot attend. Further, the candidate must provide a number of patients for various procedures—likely they are patients of the dentist's practice.

The candidate faces not only geographic obstacles, and sponsorship and patient attendance issues, but the two current programs are costly. The current UCLA program's tuition for the 11-session program is $2,395.

To facilitate RDAEF program access, regardless of whether new functions are added to the classification, the state needs to take measures to accommodate the working RDA and to address the dearth of programs available. Over the past five years, an average of 86 new licenses were granted each year for this dental auxiliary designation. As mentioned in the RDA discussion, with the broadening of that category the educational requirements and examinations would need reassessment to ensure adequacy and validity of the RDA certification program. Concomitantly, the RDAEF educational requirements and clinical tasks would need revisiting—even if the scope of practice is unchanged. However, as the current educational system for the RDAEF is ineffectual other approaches should be embraced.

The state should consider the RDAEF program requirements in total, then determine how the program can be modulized. Reason suggests that the program can be structured using a college-type framework. For example, certain core courses would likely be prerequisites to undertaking the more advanced classes; then other classes can be taken to obtain a discrete certification or to complete the entire program of study for licensure. As mentioned in the RDA discussion, a modulized educational delivery system would also afford opportunities for programs to provide task-specific certification—amalgam or composite restorations—or training for specialty dentistry such as orthodontics and oral surgery dental practices.

Specifically, rather than requiring the undertaking the entire program at once, RDAs could approach the program component by component. Similar to a college setting, the completion of each course would require traditional educational processes and achieving a passing grade. Further, courses dictating the demonstration of clinical/practical skills would also require practical examinations.

Certain classes for specific tasks such as amalgam restorations or orthodontic assisting could be designated for individual certification; after completing the prerequisite education the RDA could undertake the coursework especially designed for that specialty or task and attain certification to provide that service. Once the RDA completes the full RDAEF program (comprised of prerequisite or core classes plus the completion of other courses that may or may not afford opportunities for specific course certification), they would be eligible to apply for the expanded function licensure. The college framework model world suggest that upon successful completion of specified coursework, individuals should be eligible for licensure without a state-level examination process. However, examination scores for RDAEFs over the past five years reflect that over 20 percent of the candidates fail the examinations. Considering that we are recommending the addition of the more advanced restorative procedures to the category, the written and practical examination process should remain.

Whether the program is redesigned to be accomplished in modules or requires completion at one time in its entirety, the state should take steps to ensure that sufficient numbers of programs and courses are offered though its college and university systems to provide reasonable access to attain the required education and clinical training. Moreover, opportunities exist for the state to work in concert with the California Dental Association and other professional organizations to develop and offer appropriate coursework for this certification. Thus, board-approved programs could be available statewide through a variety of sources.

According to COMDA, there are 20 accredited dental hygiene schools in California and more than 73 approved "full" educational programs at community colleges and proprietary schools offering dental assisting courses. Once the state adopts an educational framework that is consistent with the duties and responsibilities of the RDAEF classification, is reasonable, and affords a practical educational setting, we believe offerings from the various institutions will follow. For example, community college programs could offer credential or extension programs affiliated with dental schools; similarly, proprietary schools affiliated with dental schools may choose to enter the field.

Expanding the opportunities for dental assistants and genuinely providing not only the pathway but reasonably facilitating their career progression through enabling program access will help the COMDA, the California Dental Board, and the state meet the legislative mandate set out years ago. Expanding the duties and competencies of RDAs though a meaningful and complete licensure program should generate greater capacity for patient treatment as well as ensure and improve the quality of care.

**Supervision**

The tasks undertaken by the RDAEF by nature are more difficult and require a greater level of skill. As with RDA supervision, the dentist is best suited to assess the knowledge, skills, and abilities of an RDAEF and to determine what activities will be delegated and how closely the individual needs to be supervised. Thus, the determination for the appropriate level of supervision should be assigned to the supervising dentist.

RDAs and RDAEFs should be allowed to work under the supervision of an Registered Dental Hygienist in Alternative Practice (RDHAP) in public health settings. This supervision must be limited to those duties related to general dental assisting and falling within the scope of practice for both the dental assistant and the dental hygienist. Therefore, while the RDA or RDAEF would provide general support and assisting practices, and sealant (if provisions are changed for the RDA) and fluoride treatments under the supervision of an RDHAP, they should not be allowed to conduct those practices such as restorative services that are not within the RDHAP's scope of practice.

Existing law limits to two, the number of RDAEFs one dentist may "utilize in his or her practice." We recognize that the ability of a dentist to effectively supervise can be

compromised if the span of control is spread too thin. While we did not identify an optimal number of RDAEFs to be allowed, we believe that the law should afford some flexibility. Specifically, we recommend that the limitation of two RDAEFs should remain in place for general purposes; however, the terms should provide that dentists may apply to the California Dental Board to obtain a waiver from the limitation. The application should provide the Board sufficient evidence of the practice or facility's operation and supervisional structure that ensures adequate and appropriate monitoring, supervision, and oversight of RDAEFs such to safeguard the quality of care and protect the well-being of the patients. Thus, we recommend that the California Dental Board have the authority to approve the utilization of more than two RDAEFs in the appropriate circumstances. Therefore, rather than providing "wholesale" approval of multiple RDAEFs, those dentists interested in optimizing their practice or public health care facility through the expanded function auxiliaries can obtain the approval to do so. We believe that this waiver process can prove particularly important in building and improving California's "safety net" organizations.

**Enforcement**

The California Dental Board is charged with enforcing activities of dental auxiliaries. Individuals licensed by the State are bound by ethics and practice regulation generally to work within their scope of duties, provide competent care, and protect patient well-being. Enforcement provisions relating to RDAEFs are already in place and likely would not change with any scope of practice amendments.

In terms of RDAs earning "certifications" for certain functions or specialty areas, we believe the process can be accomplished without undue regulatory burden on the auxiliary member, the dentist, or COMDA. Specifically, when a RDA is awarded a certification by the educational entity, the RDA should be required to submit that certification to the COMDA and to the employing dentist. The employing dentist should be responsible for maintaining this evidence of certification in the auxiliary's personnel file. As in other auxiliary categories, the Board is charged with monitoring and oversight of RDAEFs. Moreover, as the dentist is responsible for all activities undertaken by all of his or her employees, the dentist is the ultimate enforcement and compliance mechanism.

**Implications of the Proposed Changes**

We expect the changes to the RDAEF scope of practice will result in some administrative costs to COMDA as well as provide some savings and private dental practices, public health facilities and programs, and the RDA occupation should realize several benefits. COMDA and the California Dental Board would incur some costs related to reviewing and amending educational and curriculum requirements, and approving programs for the broadened RDAEF category. Additionally, the COMDA would have additional administrative functions related to specialty certifications. The examination component,

as it is already in place, would require reassessment to assure continued validity—as currently required.

The educational institutions that currently offer RDA programs would also incur some costs to develop the expanded function courses and offer the programs. These costs could be mitigated to some extent if the "extension program" concept is adopted that traditionally requires that courses be self-supporting.

In terms of benefits, dentists should realize greater opportunities to utilize the increased knowledge base, skills, and abilities of the RDAEF and thus delegate more duties than currently allowable. The benefits that can result include greater productivity; dental team patient contact; more highly skilled, competent dental auxiliary staff; and longer staff retention due to greater job opportunity and satisfaction. Moreover, like the RDHAP, the expanded function RDA would significantly increase the capacity of dentists to provide dental care services to underserved populations, thus expanding California's oral health care network.

# Dental Hygiene

Dental hygienists' principal responsibility is to provide preventive and therapeutic oral health care and assist patients in developing and maintaining good oral hygiene. In California, Registered Dental Hygienists (RDH) are required to complete extensive educational and clinical preparation including coursework in dental and biomedical sciences in a program that cannot be less than 1,600 hours in duration. Ultimately within the dental field, hygienists become preventive care specialists while other dental professionals are most often generalists or restorative care specialists. As of March 2002, there were 14,561 RDH licensees in the state; however, we cannot determine how many are presently practicing. Moreover, hygienists commonly work less than full-time and, thus, the licensure numbers do not accurately reflect full-time productivity.

As reported in the Journal of the American Dental Association in December 2001, over the past 40 years there is a growing trend from providing restorative services to preventive care. The journal provides statistics showing that nearly 48 percent of patients visiting their private practice dentist in 1999 received prophylaxis or fluoride treatments, whereas in 1959 only 21 percent of patients received these services. Further, in 1959 over 40 percent of the patients visited their dentist for fillings—in 1999 only seven percent of patients going to their private practice dentists obtained this procedure.

The figures cited above certainly reflect an increasing demand for preventive and prophylactic care. According to COMDA statistics, over the past five fiscal years, California licensed an average of 529 new hygienists each year. During that same period, the total number of hygienist licensees grew approximately 10 percent. While population figures reflect a growth of seven percent, with a population of 34.8 million, California offers one hygienist for each 2,390 people.

Under California laws and regulations, Registered Dental Hygienists may perform dental hygiene activities as well as all those duties established for registered dental assistants (RDA). It is common in several states for dental hygienists to be allowed to perform duties of the dental assistant categories. While this is true in California, in practice it appears that dental hygienists do not often perform those procedures. As such, since hygienists infrequently operate in a dental assisting capacity and tend to concentrate their attention and continuing education efforts on the hygiene field, their core competencies do not necessarily reside in the dental assisting and restorative areas. Moreover, many auxiliaries within the state view restorative and preventive dentistry as two separate career paths that could be considered mutually exclusive. While some RDAs may choose to return to school to undertake a dental hygienist's course, the focus and design of the two programs and career paths do not build upon each other in a clear progression from assisting to hygiene.

Our review of state regulatory structures shows that the dental hygiene scope of practice in most states addresses a standard set of procedures including hygiene assessment and implementation as well as therapeutic and preventive measures such as prophylaxis, curettage, and preventive topical agents. Like California, other states also closely

regulate certain procedures such as radiography, nitrous oxide, and local anesthetic—requiring special courses and certification before a hygienist is allowed to perform these functions. In order to address changing technology and techniques, the dental hygiene scope of practice should be defined in a broad sense to encompass the general practice of hygiene.

## Registered Dental Hygienist

The occupation of dental hygiene may be characterized as follows:

> ***Dental hygiene:*** *Providing prevention and treatment of oral disease through assessment, preventive, clinical, and other therapeutic services*.

Our review indicates that defining the practice of dental hygiene in a broad sense would enable a RDH to use their training and skills to the fullest extent. Currently, regulation specifies the duties hygienists may and may not perform. This model is rigid and does not fully utilize the abilities of the dental professional. As a primary provider of preventive and therapeutic dental health care, the scope of practice should be crafted to reflect the occupation. For example:

> *Any preventive or therapeutic dental hygiene interventions including, but not limited to, assessment, education, planning, screenings, and treatment.*

A broader, more encompassing concept of regulation is currently under consideration by the Legislature. Senator Figueroa's Senate Bill 2022 provides a similar definition of the practice of dental hygiene and delineates the parameters in terms of duties prohibited under the statute. Moreover, the bill's definition aligns with the intent of the dental hygiene practice that we found nationwide. This proposed scope of practice for RDHs should appropriately allow for the full utilization of the knowledge, skills, and abilities of dental hygienists practicing in California today.

Additionally, dental hygienists are trained and capable of providing general hygiene treatment, advice and planning activities without supervision of a dentist. In particular, as specified in SB 2022, RDHs are fully qualified to conduct advisory services in terms of health educational services, oral health training, and dental health screenings without direct or general supervision. Amending the scope of practice to allow such activities, at least in the public health arena, would bring to the public valuable information and may provide entry into the dental health care loop for those individuals who would otherwise be unserved. As professionals, RDH's ethics and standards of practice would mandate their conduct be within the parameters of their practice.

### Regulation and Scope of Practice

A broadened scope of practice for RDHs should be non-permissive in approach—specifically establishing practice boundaries by defining prohibited duties and activities. Existing regulation already delineates the following prohibited duties.

> *RDHs should not perform the following duties that require the knowledge, skill, and training of a licensed dentist*:

- *Diagnosis and non-hygiene treatment planning*
- *Surgery or cutting procedures on hard or soft tissue, with the exception of soft tissue curettage*
- *Prescription of medicines*
- *Placing, condensing, carving, or removal of permanent restorations*
- *Reaming, filing, or filling root canals*
- *Taking impressions for permanent prosthodontic appliances*
- *Restorative procedures restricted to the RDA category*

Under existing regulation, other duties are prohibited unless the RDH has taken a board-approved course. These procedures include radiography, soft tissue curettage, administration of local anesthetic, and administration of nitrous oxide. We recommend that the course requirements for these procedures remain in place.

While Senator Figueroa's bill redefines the hygienists' scope of practice and focuses the occupation on preventive, therapeutic, and prophylactic measures, it also proposes sunset provisions related to the dental hygienist's role related to registered dental assistant activities. Specifically, current regulation automatically includes the scope of practice of RDAs into the RDH's occupational description. However, with the focus on hygienists providing primary preventive care, we find that the sunset amendment correlates with our view that RDA and RDH duties and responsibilities should be separate occupations. Thus, Senator Figueroa's proposal that the automatic provision for dental hygienist's to also provide RDA duties sunset, and that in the future those RDHs choosing to provide RDA services would need to meet the RDA examination requirements to conduct those services.

Senator Figueroa's bill also includes an important provision related to public health programs. Senate Bill 2022 contains provisions that would allow RDHs to not only perform oral screenings within federal, state, and locally created public health care programs but would allow them to also provide preventive services, in particularly fluoride and sealants, without supervision. This provision would be instrumental in reaching underserved populations such as migrant farm workers and underprivileged school children and would directly impact and fulfill the legislative intent related to dental auxiliaries.

**Supervision**

We also recommend that supervision levels be defined in a more broad sense for the RDH scope of practice. Within the dental office, the supervising dentist should have the ability to define the level of supervision in which the hygienist performs their scope of duties depending on the RDH's competency. Thus, rather than defining duties and responsibilities is terms or "general" or "direct," we recommend the dentist be given that discretion. For example:

*"The level of supervision for each dental hygienist should be determined by the dentist based upon deliberative and ongoing assessments of the individual's knowledge, skills, and abilities."*

The dentist would appropriately be liable and accountable for determining and ensuring that the hygienists provide services under the level of supervision appropriate to the knowledge and abilities of each RDH.

As an exception to the supervision requirements, as previously addressed, SB 2022 would allow RDHs to provide services in federal, state, and locally created public health programs without supervision. As dental hygiene specialists, according to the American Dental Hygiene Association, hygienists receive three times more clinical instruction in periodontal and preventive procedures than general dentists. Additionally, currently RDHs working under general supervision may provide these services without the dentist being present. Thus, we concur with the allowances providing for independent services within these particular settings and believe that these exceptions will afford important access to dental health care.

**Education**

Dental hygiene schools must be nationally accredited, as are the examinations. To become licensed, professionals must complete a RDH program accredited by the Commission on Dental Accreditation of the American Dental Association, and pass both a national written examination, a clinical practicum that tests the applicants ability to perform core preventive procedures.

However, despite growth in the population and increased dental care needs, few new hygiene programs have become available statewide. Thus, the state should encourage community colleges and proprietary schools statewide to develop new programs to afford greater entry into the profession. Currently, far more programs exist for dental assisting than dental hygiene—according to COMDA, there are 73 approved RDA programs while only 20 schools are accredited to offer dental hygiene programs. Building greater educational opportunities should not only increase the number of dental hygiene professions in the state but should also directly increase the capacity and access to quality preventive care in the state.

**Enforcement**

Another bill by Senator Figueroa, Senate Bill 1955, puts forth the concept of an independent board to regulate the practice of dental hygiene. Currently, enforcement of the practice lies within the California Dental Board. If the Board were to maintain its current role, we view that the current enforcement functions remain in place. However, if

a separate board were developed specifically for dental hygiene, we would recommend that the enforcement activities be vested in the new board.

The employing dentist or dental facility is responsible for ensuring the professional and legal conduct and practice of dental hygienists working in this employ. Moreover, professionals licensed by the State are bound by ethics and practice regulation to practice within their scope of duties, provide competent patient care, and to protect the patient well-being.

**Implications of the Proposed Changes**

The impact of these recommendations to existing regulations will likely result in limited additional costs, but should increase the ability of the dental hygiene profession to serve more patients, and in turn, improve California's oral health. While the general change in definition and structure of the scope of practice has no immediate fiscal impacts, adding more dental hygiene programs into state colleges and universities would have a fiscal impact. Schools would incur costs related to developing curriculum and gaining accreditation as well as general start-up costs involved with implementing a new program.

Benefits should include the dentist's ability to realize greater opportunities to utilize the competencies and abilities of the RDHs in the dental office and in particular, within the public health arena. This would allow dentists to delegate more duties than currently allowable and have greater flexibility in supervising each task and RDH. Moreover, RDHs choosing to provide preventive services to underserved populations could vastly increase the number of individuals receiving oral health care. Similar to the impacts envisioned with the amendments to the RDA scope of practice, the result should be additional productivity; greater access to preventive oral health care; more competent dental auxiliary staff; and longer staff retention due to greater job opportunity and satisfaction.

## Registered Dental Hygienist in Extended Functions

We find that the dental assisting and dental hygiene professions are, in practice, two distinct career paths each requiring specific educational programs and examination processes. While the RDA works primarily in general dentistry and restorative procedures, the RDH provides preventive oral health care. However, under existing regulation, both the RDA and RDH categories may pursue affiliated Extended Function (EF) designations that are identical in scope and practice, intended to broaden opportunities for each category's career progression. The majority of the duties delineated for the EF categories for both occupations fall primarily into the area of restorative dentistry. With the exception of applying etchants and pit and fissure sealants, the majority of the EF duties would infrequently be performed by a dental hygieniest. California's licensing statistics show that while there are over 750 licensed RDAEFs as of March 2002, only 17 dental hygienists held the RDHEFs designation in the state.

As the scope of practice for dental hygienists moves to a more open model, most, if not all, of the current EF duties that align with the preventive care should fall within the amended duty definitions. The lack of participation in the RDHEF category combined with the potential changes in the existing scope of RDH duties will therefore warrant substantial reconsideration of the role and relevance of the RDHEF category. It is unclear whether there would remain sufficient reason to maintain the category or whether it could appropriately present opportunities for the RDH's progression within the dental hygiene profession.

Although there is a very small group of individuals licensed as RDHEFs, these individuals have likely realized the value of the designation as currently devised. However, the situation presents two unanswered questions:

- Should the EF designation continue specifically for the RDH—is there some long-term benefit and relevancy to the EF designation within dental hygiene?
- Should the RDHEF category sunset?

Earlier in the report we present an alternative approach to regulating registered dental assistants and registered dental assistants in extended functions. In addition to broadening the scope of practice for the RDA to be more inclusive of required and customary general and restorative assisting knowledge and skills, we also propose increasing the flexibility of the supervising dentist to delegate to the RDAEF additional, more advanced restorative duties such as placing and carving amalgam restorations. In this model, it is apparent that the new RDAEF will not mirror the RDHEF and will further separate the two occupations as the focus of the RDAEF is built upon the restorative processes of dental assisting. A dental hygienist choosing to pursue the restorative and general dentistry practices could continue by also attaining the RDA certification and, further, the RDAEF designation in lieu of the RDHEF.

If it is determined that there is a need for extended functions within the hygiene profession, then the scope of practice must be studied to ascertain the intent and activities relevant for including in an extended function category. Our outline for the amended RDH category allows hygienists to fully function within the scope of dental hygiene and conduct all procedures that are educated and competent to perform. As such, it is unclear which duties could be considered extended functions within hygiene, and what the need within the profession for those services would be. Additionally, with any evolution of the RDHEF category, the educational programs would need to be developed and made available to provide the necessary education for the procedures included in the classification.

Sunsetting the RDHEF category would necessitate addressing those individuals currently holding the designation. There is potential to "grandfather" those holding the RDHEF license into the RDAEF category in a similar fashion to what we recommend for those existing holders of the RDAEF certification facing an evolved scope of practice. In order to obtain the RDAEF and be appropriately "grandfathered," RDHEFs would need to obtain the required specialty certifications to be "relicensed" in a reconstituted RDAEF category.

On a go-forward basis, unless the RDHEF classification demonstrates long-term relevancy or can be built upon the educational and clinical programs developed for the RDAEF program, it may be unfeasible or of little value in the profession to continue the designation.

## Registered Dental Hygienist in Alternative Practice

In 1998, the Registered Dental Hygienist in Alternative Practice (RDHAP) was created to address the segments of the population in the state lacking sufficient access to dental health care. The authors of the original bill creating the RDHAP believed that the new category would provide safe preventive services to populations that have historically been deprived—in particular they described "the disabled, infirmed, homebound, uninsured," those residing in care homes, the developmentally disabled, and others who are outside of the traditional oral health care network. Regulations were intended to maintain the standards of dental practice while protecting the health and welfare of patients. The RDHAP works independently of a supervising dentist, typically in a public health or shut-in setting. Like the registered dental hygienist, the RDHAP provides preventive dental health care, but their current scope of practice is somewhat limited.

Under existing law, before a RDHAP may treat a patient, a physician or dentist must have first examined them and written a prescription for care. Existing law also delineates the settings in which hygienists may provide alternative practice care. Without a prescription, the RDHAP must function under a licensed dentist's general supervision for most procedures.

While it is clear that this category was created to improve access to care in the public health arena targeting underserved populations, the implementation of the category has been ineffective. When AB 560 created the "alternative practice" category, there were 21 hygienists participating in the associated Health Manpower Pilot Project that were eligible for "grandfathering" into the new designation; as of 2002, no new RDHAPs have been licensed within the state.

To date the state has not facilitated the implementation of the Legislature's intent for this designation. Laying no blame, there are no approved education programs for the RDHAP program; therefore, there is no potential to increase the number of licensees in this category. Moreover, the requirement for a dentist's prescription prior to treatment is cited to constitute a barrier to services for certain underserved populations. As a result, the benefits envisioned to be provided by this "independent" dental health care auxiliary have not been realized. As such, the needs of those intended to be served by RDHAPs remain unmet. The issues related to the unmet oral health care needs are clear: childhood caries, according to studies, is the number one childhood disease; yet according to the Surgeon General's Report on Oral Health Care in America, 25 percent of poor children have not seen a dentist. Moreover, large segments of the population—particularly senior citizens and immigrants—and special groups such as the disabled, immigrants, and others have insufficient access to a dentist and lack insurance or the means to pay for care.

However, the initial objective of AB 560 remains viable—that is, by increasing the opportunities for licensure as RDHAPs, more people will likely obtain preventive and therapeutic care, go on to a dentist by referral from the RDHAP, and potentially obtain critical complicated hygiene or restorative work. Studies show that providing preventive

care is less expensive than providing restorative services. Moreover, studies indicate that reaching individuals before dental disease sets in should improve overall health and could reduce public health costs. RDHAPs would provide the first line of services, and refer those needing additional attention to dentists—thus, bringing more patients into the oral health care loop and improving the total health of many Californians.

**Regulation and Scope of Practice**

Our review suggests that the RDHAP scope of practice should mirror that of the RDH. While current regulations specify that the RDHAP not perform the RDH duties specified to be conducted under "direct" supervision, we find that the additional education and the significant hours of experience required for the RDHAP designation justifies the full inclusion of all RDH duties into the scope of practice.

The intent of the RDHAP category is to provide preventive and therapeutic care to those persons most unlikely to attain these services in the traditional dentist's office. Seeking to target seniors in nursing homes, underprivileged children seen in a school dental care program, individuals seeking services in "safety net" and other public health and institutional settings, RDHAPs may work for a dentist, be independent practitioners, or work for another RDHAP.

Patient of Record

In the existing RDHAP environment, patients must be "of record" or first examined and diagnosed by a physician or dentist before any procedures can be delegated to a dental auxiliary. The "patient of record" requirement ensures that a licensed physician or dentist has scrutinized the medical history and made informed decisions regarding oral health treatment based on the medical condition of the patient and writes a prescription for needed dental care. Business and Professions Code Section 1684.5(a) specifies that with the exception of a few minor tasks, that "it is unprofessional conduct for any dentist to perform or allow to be performed any treatment on a patient who is not a patient of record of that dentist." However, this requirement can present a considerable barrier in the path to providing basic preventive services to underserved populations. By definition, these are the very patients that are least likely to have access to a dentist or physician. In settings such as "dental health professionals shortage areas" or in programs seeking to provide preventive services to school children or rural farm workers, first obtaining an examination and prescription from a physician or dentist may effectively prevent an individual from obtaining dental care.

Therefore, the state should consider alternatives for the prescription and patient of record requirements in specified settings. One example exists in the laws and regulations related to physician assistants. The concept behind the physician assistant, particularly in the public health care environment, is similar to that established for the RDHAP. California Code of Regulation Section (CCR) 1399.540 provides:

> *"A physician assistant may only provide those medical services which he or she is competent to perform and which are consistent with the physician assistant's education, training, and experience, and which are delegated in writing by a supervising physician who is responsible for the patients cared for by the physician assistant."*

Under these laws and regulations, the physician assistant may establish an "agent" or sponsor relationship with a supervising physician. Regulations set out the parameters for this arrangement that establish an umbrella of services the physician assistant may provide on behalf of the supervising physician—these agreed-to practices and services are not patient specific. This relationships requires a written "delegation of services agreement" that explicitly sets out the type of procedures delegated, consultation requirements, practices setting/sites, and emergency specifications. The supervising physician and the physician assistant must sign and maintain the agreement. Additionally, the physician must prepare a written "supervising physician's responsibility for supervision of a physician assistant" statement confirming the supervision protocols set out in regulation.

It is the responsibility of the supervising physician to ensure that the physician assistant does not "function autonomously" and the law provides that the physician is responsible for all medical services provided by that physician assistant. While the services are provided to patients independent of the physician, there must always be the supervising physician or a designated alternate "available in person or by electronic communication" for consultation or assistance.

Thus, the agent relationship addresses the "patient of record" and the "prescription" issues through specified delegation agreements. CCR 1399.541 states:

> "*a physician assistant acts as an agent for that physician, the orders given and tasks performed by a physician assistant shall be considered the same as if they had been given and performed by the supervising physician."* Further, "*unless otherwise specified in these regulations or in the delegation or protocols, these orders may be initiated without the prior patient specific order of the supervising physician."*

As the dentist's agent the RDHAP, like the physician assistant, would prepare and update case files (that would include formally noting the supervising dentist's name) that would be reviewed by the dentist under the terms specified in the delegation agreement. Hence, similar logic and structure could establish comparable relationships between dentists and RDHAPs that would mitigate the

barriers presented by prescription and "patient of record" issues and afford the hygienist in public health care environments the flexibility to initially screen and see patients without an initial examination by the dentist but retain the dentist as the ultimate supervisor and provider of record.

The State of Maine allows dental hygienists to provide care in public health settings using "specific standing order" procedures. Under Maine Rules and Regulations Related to Dental Assistant Section 4—Public Health Supervision Status,

> "*The Board may grant 'Public Health Supervision' status to a hygienist in situations the Board deems appropriate in its discretion, giving due consideration to the protection of the public. 'Public Health Supervision' means that a dental hygienist with an active Maine license practices in a public or private schools, hospital, custodial care institution or other non-traditional practice setting under the general supervision of a dentist with an active Maine license. In each program the dentist should have specific standing order or policy guidelines for procedures which are to be carried out. ...A written plan for referral or an agreement for follow-up shall be provided by the public health hygienists....A summary report (prepared by the hygienist) at the completion of the program or once a year shall be reviewed by the supervising dentist."*

These provisions allow public health hygienists to work independent of their supervising dentist as long as services are rendered within the stipulated standing order and protocol. Therefore, with the hygienist acting as the agent of the supervising dentist issues related to "patient of record" are addressed as the patient is the under the care of the dentist through the hygienist. Moreover, the issue related to the prescription is solved by way of "standing orders."

New Mexico also has a model for an independent dental hygienist in its Collaborative Practice Dental Hygienist. Like Maine's model, the Collaborative Practice hygienist maintains a practice agreement with a licensed dentist and establishes a standing order for basic preventive procedures. We provide more detail related to New Mexico's model in the Appendix of this report.

Laws and regulations could establish provisions establishing "agent" relationships between RDHAPs and supervising dentists applying exemptions to the mandates that the dentist first examine and prepare a formal prescription for specified settings and programs. The RDHAP would then be responsible for developing and maintaining case files and establishing appropriate "patient of record" documents within the oversight of the required affiliated licensed dentist. A delegation agreement would specify exactly the procedures and duties delegated to the RDHAP and would establish the agreed-upon oversight or supervision method. Physician assistant regulation sets four supervisory or oversight options:

- *Examination of the patient by a supervising physician the same day as care is given by the physician assistant.*
- *Countersignature and dating of all medical records written by the physician assistant within 30 days that the care was given.*
- *The supervising physician may adopt protocols for some or all tasks undertaken by the physician assistant. The supervising physician would be required to review, countersign, and date a sample of a minimum of 10 percent of patients treated under the protocols.*
- *Other mechanisms approved in advance by the Physician Assistant Committee.*

Requirements for frequent or periodic patient case file reviews would ensure appropriate care and oversight is maintained.

RDHAPs are trained and ethically bound to refer patients exhibiting abnormalities to a licensed dentist. Therefore, the dentist affiliated RDHAP could conduct the necessary referred services as well as provide the needed advisory, consultative, or emergency role, thus appropriately protecting the health and welfare of the patients.

**Education**

One of the primary reasons that the RDHAP licensure category has not progressed is the lack of any program offered for the certification. While it is unclear exactly the reasons behind the absence of these programs, we find that the regulatory provisions have limited the type of educational institutions allowed to enter this field. Clearly, without the appropriate educational programs available statewide, RDHAPs cannot position themselves to expand available dental health care resources and help address the issues related to access to care.

Existing regulation requires that a college or institution of higher education "affiliated with a dental school" conduct RDHAP programs. However, the content of the curriculum established for the designation is not necessarily clinical in nature and primarily relates to topics traditionally taught in colleges and universities with health-related programs rather than dental schools. Certain specified topics such as dental hygiene and dental hygiene treatment planning, and oral pathology could be taught in conjunction with the dental hygiene schools already in existence, while many of the other courses such as sociology, psychology, and the treatment of special populations are likely more widely available at state colleges and universities. An important point to note, however, is that a RDHAP does not undertake any addition procedures or duties than those delineated for the RDH—only the practice setting and supervision levels change.

To implement and provide access to the licensure program, we recommend that RDHAP educational programs follow a similar model to the one recommended earlier in this report for the RDAEF. Unlike other dental auxiliary categories, existing regulations for the alternative practice licensure specifies that the candidate have 2,000 hours of experience. As working individuals, the required completion of a 150-hour educational requirement at one time in its entirety would likely be a significant career and economic burden on the candidate. Therefore, by structuring the coursework in either a college-type or extension model would afford the most opportunity for entry into the field.

Rather than requiring that the entire program be taken in one package, eligible RDHs could approach the program one course at a time or component by component. Specifically, core courses should be designed as prerequisites required to be completed before moving on to take advanced courses. Once all courses are complete, the student should be eligible for the license if all other license requirements are also met.

Depending on the specific curriculum adopted, RDHAP programs could be introduced in educational facilities within the state that already offer approved RDH programs or made available through extension-type education programs. Many educational facilities have an affiliation with a dental school and, since the coursework requirements are primarily didactic, it is unclear why the program would need to be housed within a specific dental school. In selecting the particular curriculum for the RDHAP licensure, the COMDA should ensure that some courses specifically address public health issues and underserved populations. These topics would prepare RDHAPs to effectively work in the intended settings and maintain the educational focus relating to the primary intent of the RDHAP category. Further, the curriculum and testing within the educational program should ensure that RDHAPs are competent in taking and reading medical histories in order to avoid potential issues that could arise as a result of a patient's special medical condition or history.

The educational components and the experience requirements appear sufficient for RDHAPs to work independently and competently. Moreover, existing provisions also stipulate that a candidate's experience be current and requires the RDHs to have a bachelor's degree or equivalent to obtain a RDHAP license. When considering the formidable experience, coursework, and bachelor's degree requirements, a board approved, written examination for licensure does not appear warranted; particularly when the primary function of the auxiliary is to provide dental hygiene services—the very discipline that they previously have demonstrated competency in when they demonstrated their understanding and skill in passing the Board's RDH examination.

**Setting for Services**

Existing law does not provide for the RDHAP to be employed by a health clinic. Because many of the individuals that the RDHAP designation is targeted to serve obtain their health care through these clinics, we recommend that the service setting provisions for the category include health clinics to ensure that RDHAPs are appropriately allowed

to reach the underserved populations. These settings could include county clinics, non-profit community health centers, or other care clinics addressed in Health and Safety Code Sections 1204 and 1206. Currently, the Legislature is considering Senator Perata's Senate Bill 1589, that outlines a similar course of action. Senator Perata's bill would allow RDHAPs to become direct employees of specified clinics including those outlined in the code mentioned above, clinics operated by a public hospital or health system, or a clinic operated by a hospital maintaining a primary contract with a county government.

Other general settings already outlined in code should remain, including schools, homebound residences, and other residential or health facilities providing services to underserved or special needs populations.

In public health settings RDHAPs may employ other RDHAPs and dental assistants. They should also be allowed to supervise RDAs and RDAEFs. As discussed previously in the sections related to these auxiliary categories, allowing RDAs and RDAEFs to work for RDAHPs would further extend the preventive services provided in this environment. Clearly, the services rendered by these other auxiliaries would be restricted to those competencies shared with the RDHAP—for example, RDAs and RDAEFs would not be authorized to provide restorative services but could provide sealants and fluoride treatments.

**Enforcement**

As mentioned earlier in this report in the RDH section, a recent bill introduces the model of an independent board charged with regulating the dental hygiene practice. Clearly, if a new board were created it would assume the role to regulate the RDHAP category. If the new board were not enacted, then the enforcement responsibilities for the RDHAP would remain with the California Dental Board.

As with all dental auxiliaries, and all health care professionals, the individual practitioner is responsible for practicing within the provisions of the laws and regulations, to provide competent and safe care to patients, for protecting the well being of those served, and to act ethically and responsibly. RDHAPs are state licensees and allowed to operate independent of a supervising dentist; thus, they are fully responsible for their actions.

**Implications of the Proposed Changes**

We believe that these recommendations for the RDHAP category would increase the ability of the dental hygiene profession to serve more patients especially from underserved populations. This, in turn, would allow greater access to preventive services and improve oral health. Yet, by improving pathways for RDHs to become RDHAPs, more working hygienists may choose to pursue this path and take capacity away from the dental offices.

Trends indicate that hygienists are in demand within dental offices and in public health settings and, currently, there are an insufficient number of these professionals to meet these demands. With a true implementation of the RDHAP program, the need for additional dental hygienists will continue to grow. As discussed earlier in the RDH section of this report, we find the state should seek to increase the number of accredited hygiene programs, and in turn, the affiliated RDHAP programs to improve the entry into both of these categories. By further opening up the field of hygiene, the supply of dental hygienists will increase; therefore minimizing the effects to dental offices of hygienists pursuing the RDHAP category. Moreover, as mentioned earlier in this section, bringing more patients into the dental health care loop will certainly increase the need for the services of dentists and all categories of auxiliaries.

The suggested changes in the structure of the RDHAP educational program will have some fiscal impacts. In implementing the program within educational facilities, schools would incur costs related to developing curriculum and gaining program approval. These impacts should not be great since many of the required courses could likely be fulfilled with existing classes offered at the state and private colleges and universities. Additionally, the California Dental Board and schools would incur general start-up costs involved with implementing new programs. If the RDHAP program is created within extension programs, these costs may be minimized since extension programs are typically designed to be self-sustaining. However, because of their self-sustaining concept, extension programs may impose higher costs to students.

## Appendix—State Case Studies

# State of Arizona

## Regulatory Structure

Arizona recognizes two groups of dental auxiliaries—dental assistants and dental hygienists. The regulatory structure appears closed for one category and open for the other. Specifically, regulation and statutes related to the unlicensed dental assistant category are prescriptive, defining allowable and prohibited duties. Its laws and regulations related to dental hygienists, on the other hand, are broad and relatively simple. The listings of duties, levels of supervision, and educational requirements for the two categories of dental auxiliaries are spelled out in both statute and regulation. Allowable and prohibited activities for dental assistants are generally described in regulation (Arizona Administrative Code, Title 4, Article 7) with minimal description in statue (Arizona Revised Statutes Title 31, Article 4, Section 1291), while dental hygienists are described primarily in statute (Arizona Revised Statutes Title 31, Article 4, Section 1281) with only prohibited duties and general allowable duties statements in regulation (Arizona Administrative Code, Title 4, Article 6).

According to officials at the Arizona Board of Dental Examiners, the regulations have been in their current form for a long time. The board believes that the open nature of the hygiene practice allows for regulations and statutes to accommodate changes in technology. However, the board feels that the dental assisting category should be closely controlled by prescriptive allowable and prohibited duties. Officials stated that no changes were made to Arizona's Dental Practice Act when it was opened during the last legislative session.

## Dental Assistant

The scope of practice for the dental assistant in Arizona appears quite limited. This auxiliary category is the only one identified for dental assisting and is not licensed nor does it include any educational requirements besides radiography training. To compare the general assisting practices between Arizona and California, we analyzed the provisions; for our purposes, we combined the duties of California's unregistered dental assistant (DA) and the registered dental assistant (RDA) as Arizona has a single designation. In the table on the following page, we noted the duties specific to California's RDA.

There are a variety of duties allowable for California's DA and RDA that are not specifically mentioned in Arizona's provisions. While it is likely that some of the unmentioned duties would fall within the general provision of "*place dental material into a patient's mouth in response to a licensed dentist's instruction,"* it appears that generally a dental assistant's role in Arizona is quite limited. Moreover, although seemingly basic supportive dental assisting procedures such as intraoral retraction and suctions, and

mouth-mirror inspections are not specifically listed in their duties, officials from the Arizona Board of Dental Examiners stated that those duties are typically performed by dental assistants under direct supervision, and although not technically allowable, they would not be considered outside the scope of practice.

| Arizona—Dental Assistant | California—Dental Assistant or Registered Dental Assistant |
|---|---|
| Place dental material into a patient's mouth in response to a licensed dentist's instruction | Supportive dental procedures |
| Cleanse the supragingival surface of the tooth | |
| Remove excess and temporary cement | Remove excess cement from supragingival surfaces of teeth with a hand instrument or floss—RDA |
| Remove sutures | Remove sutures |
| Place and remove dental dams and matrix bands | -Place and remove rubber dams<br>-Place, wedge and remove matrices<br>-Hold anterior matrices |
| Fabricate and place interim restoratives with temporary cement | -Fabrication of temporary crowns intraorally—RDA<br>-Temporary cementation and removal of temporary crowns and removal of orthodontic bands—RDA |
| Apply sealants | ** |
| Apply topical fluorides | Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH |
| Prepare and observe patient for nitrous oxide | Assist in the administration of nitrous oxide analgesia or sedation |
| Train and instruct patients on oral hygiene | Extraoral duties or functions specified by the supervising dentists |
| Collect and record information pertaining to extraoral and existing intraoral conditions | Extraoral duties or functions specified by the supervising dentists |
| Expose radiographs (with certification) | Operation of dental radiographic equipment for the purpose of oral radiology (with certification) |

**May be performed only by Registered Dental Assistant/Hygienist in Expanded Functions

Arizona's regulations also specify prohibited functions for the dental assistant—they may not perform any function specifically listed for dentists, dental hygienists, or denturists; specifically, intraoral carvings of dental restorations or prostheses; final jaw registrations; final impressions for prostheses or orthodontic appliances; or activate orthodontic appliances; and any irreversible procedures. The reason for the specificity of certain of these prohibitions is unclear given the laws and regulations prescribe the duties permissible for the dental assistant.

The scope of practice for the dental assistant seems to lie in between the two California categories of DA and RDA. While a few of the California DA duties are not included in the listing of Arizona's permissible activities, the majority of them are apt to fall within the general statement. Further, many of the Arizona assistant's duties fall into the RDA category in California. However, several other of California's RDA functions are not mentioned in Arizona's provisions. Overall, it appears that Arizona's dental assistant classification is broader than California's DA, but significantly more limited than the RDA.

**Supervision**

Regulations specify that Arizona's dental assistants must work under direct supervision except for recording patient information and exposing radiographs, which must be done under general supervision. These definitions and levels of supervision are similar to those established for California's DA and RDA.

**Education**

Neither California nor Arizona require specified training or educational requirements for the "dental assistant" category; but both specify that these individuals be certified in radiography before performing those procedures. Arizona's dental assistants man provide sealants without any additional education or training. This duty can only be performed by registered dental assistants in expanded functions (RDAEF) in California—an auxiliary category requiring additional education, training, and examination to that mandated for the RDA designation.

## Dental Hygienist

At first glance, Arizona's scope of practice for dental hygienists appears similar to California's. Our comparisons of the two states' specifications of the category examined the allowable duties. We found only a single difference in the specified duties—Arizona's regulations permit dental hygienists to place interrupted sutures in terms of advanced periodontal therapy after obtaining specific certification; a duty that no auxiliary in California is allowed to perform. When just considering the duty specifications, it would seem that the practices are quite similar, but certain provisions create a significant difference in terms of overall flexibility within the scope of practice.

Arizona's regulations provide that dental hygienists may perform duties that are not specifically listed if the dentist delegates them. Specifically, the first two provisions of the regulatory provisions related to dental hygienists (Arizona Administrative Code Section R4-11-601) state:

> *A. A dental hygienist may apply preventive and therapeutic agents under the general supervision of a licensed dentist.*
>
> *B. A hygienist may perform a procedure not specifically authorized by Arizona Revised Statutes Section 32-1281 when all of the following conditions are satisfied:*
>
> *1. The procedure is recommended or prescribed by the supervising dentist.*

2. *The hygienist has received instruction, training, or education to perform the procedure in a safe manner.*
3. *The procedure is performed under the general supervision of a dentist.*

Arizona regulations include prohibited duties for dental auxiliaries but there is only one specified related to hygienists: "*Dental hygienists shall not perform an irreversible procedure*." With this significant practice boundary, the scope still appears much broader than California's provisions allow. California's rules and regulations convey many more prohibited duties (several construed as "constituting the practice of dentistry") and a few appear irreversible.

Thus, the scope of practice related to dental hygiene in Arizona is broader than California's and could be classified as "open" due to its accommodating provisions and the general absence of specifics related to allowed and prohibited activities.

**Supervision**

Arizona provisions outline that dental hygienist activities be performed under general supervision—defined as not requiring the dentist to be present in the office. However, when administering local anesthetic or nitrous oxide, dental hygienists must be directly supervised—requiring the dentist to be in the operatory performing the procedure. These supervision provisions are similar to those specified for dental hygienists in California.

**Education**

General educational requirements for dental hygienists in both states are similar—hygienists must complete a hygiene educational program and pass an examination. However, Arizona requires that curriculums include certain procedures or otherwise the hygienist must attain a certification in these few areas. Like California, hygienists must attain certification for administering both nitrous oxide and local anesthetic. Additionally, Arizona allows hygienists to place interrupted sutures but has specific educational requirements related to advanced periodontal therapy; this duty is not specifically mentioned for any auxiliary category in California. California regulations require hygienists choosing to perform soft tissue curettage to be certified for that function.

## Dental Auxiliary Enforcement

The Arizona Board of Dental Examiners carries the responsibility of receiving complaints and licensing dental hygienists. Arizona Board of Dental Examiners officials stated that complaints against assistants are typically filed against the dentist since

assistants are not licensed. While, they cannot determine how many may be attributable to the assistant, most are believed to relate to performing radiography without proper training. Officials also stated that hygienists receive very few complaints and these typically relate to substance abuse.

## Innovative Areas

The open structure of Arizona's regulations allows dental hygienists to perform duties not specifically listed if certain criteria are met. This provision permits the regulatory structure to accommodate changes in technology and techniques without major legislative changes.

## Public Health

Statues (Arizona Revised Statutes Title 31, Article 4, Section 1281) state that dental hygienists in Arizona can work in public health settings if the patient is "of record" with a dental office and the dentist has conducted an examination within the past year. Related public health facilities include health care facilities, nursing homes, and public health agencies and institutions and hygienists may only provide the services outlined in the dentist's treatment plan. The same level of supervision, be it general or direct, is required regardless of the setting and would depend upon the specific tasks outlined in the dentist's treatment plan for the patient.

# State of Colorado

## Regulatory Structure

In Colorado, dental auxiliary duties, supervision, and education are spelled out primarily in statute (Colorado Revised Statutes) with discussions of educational requirements in regulation (Board of Dental Examiners Rules and Regulations). Colorado has two categories of dental auxiliaries—"dental auxiliaries" (typically known as dental assistants) and dental hygienists.

In general, statutes provide a mix of allowable and prohibited duties for the two auxiliary categories. Additionally, the two categories have identical "general statements" in both the allowable and prohibited lists. As described in statute (Colorado Revised Statutes, Title 12, Article 35, Section 125), a dentist can assign any task not listed as allowable that does not require the professional skill of a licensed dentist. Applying this provision stipulates a "general" supervision level for hygienists and "personal direction" for assistants. Statues also state that prohibited duties include any procedures that will contribute to an "irremediable alteration of the oral anatomy." Overall, we see the structure to be relatively flexible and open and affords much discretion in complying with the provisions.

According to officials from Colorado's Department of Regulatory Agencies, the state tends to lean toward less regulation rather than more, with the philosophy that a profession or service should be regulated when there is evidence of potential harm. Another underlying concept in Colorado's regulatory model is that the dentists, in their best interests, will only delegate those duties to auxiliaries demonstrating the appropriate skills and training to perform those procedures.

## Dental Assistants (Auxiliaries)

Dental assistants within the state are not licensed, but code sets out an extensive list of allowable and prohibited duties for this category. The number of individuals employed in dental assisting roles is unknown.

We conducted a side-by-side analysis of the provisions regulating the dental assisting categories in Colorado and California. For purposes of comparison, we combined California's unregistered dental assistant (DA) and the registered dental assistant (RDA) into one column on the table that follows, and noted duties specific to the RDA.

California delineates many more tasks than what is found in Colorado's provisions. However, because of Colorado's general allowable duty statement *"any other task or procedure that does not require the professional skill of a licensed dentist*," these tasks

and more are inferred as included since they do not contribute to the irremediable alteration of the oral anatomy.

| Colorado—Dental Auxiliary | California—Dental Assistant or Registered Dental Assistant |
|---|---|
| Smoothing or polishing natural and restored tooth surfaces | Coronal polishing—RDA (with certification) |
| Provision of preventive measures including the application of fluorides and other recognized topical agents for the prevention of oral disease | Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH |
| Gathering and assembling information including but not limited to fact-finding and patient history, oral inspection, and dental periodontal charting | -Supportive dental procedures<br>-Extraoral duties or functions specified by the supervising dentists<br>- Take intraoral measurements for orthodontic procedures |
| Administering topical anesthetic to a patient in the course of providing dental care | Apply non-aerosol and non-caustic topical agents |
| Any other task or procedure that does not require the professional skill of a licensed dentist | |
| Administer and monitor the use of nitrous oxide on a patient (with certification) | *Assist* in the administration of nitrous oxide analgesia or sedation |
| Intraoral and extraoral tasks and procedures necessary for the construction of a full denture—preliminary and final impressions; bite registration and determination of vertical dimensions; tooth selection; preliminary try-in of wax-up trial denture; and denture adjustments that involve the periphery, occlusal, or tissue-bearing surfaces of the denture prior to final examination | |
| Make repairs and relines of dentures | |
| Expose patients to ionizing radiation (with certification) | Operation of dental radiographic equipment for the purpose of oral radiology (with certification) |

Additionally, as stated in the table, Colorado's structure includes duties of:

> "*intraoral and extraoral tasks and procedures necessary for the construction of a full denture—preliminary and final impressions; bite registration and determination of vertical dimensions; tooth selection; preliminary try-in of wax-up trial denture; and denture adjustments that involve the periphery, occlusal, or tissue-bearing surfaces of the denture prior to final examination.*"

Many these duties are not explicitly covered in any of California's three dental assistant categories, although some would be included in the registered dental assistants in expanded functions (RDAEF) category.

Whereas California's regulations are prescriptive, according to officials at Colorado's Department of Regulatory Agencies, dental assistants can do just about anything "reversible." Our analysis of the duty statements suggests that the functions of the Colorado dental assistant category affords more latitude and is less restrictive than duties allowed for both DAs and RDAs in California. For example, while California DAs can apply topical fluoride, Colorado's dental assistant has latitude for the "*provision of preventive measures*." Moreover, the structure of "*any other task or procedure that does not require the professional skill of a licensed dentist*" opens the scope of practice. Additionally, as previously mentioned, tasks related to dentures appear to only be allowed for RDAEFs in California—a category not only regulated, but requiring significant education and training to attain licensure. Further, Colorado's dental assistant is permitted to administer nitrous oxide with proper certification. All three of the dental assisting categories in California may only assist in the administration of nitrous oxide, and only dental hygienists, with proper certification, are permitted to administer these agents.

**Supervision**

In terms of supervision, Colorado's statutes specify that the dental assistant must work under the personal direction—orders of a licensed dentist—except for tasks related to the construction and repair of dentures, which must be done under general supervision or by a dental lab work order. Further, administration and monitoring of nitrous oxide must be under direct supervision. Generally, these requirements are similar to California's supervision levels. Further, the broad provision allowing "*any other task or procedure that does not require the professional skill of a licensed dentist*" requires that the procedures be provided under personal supervision.

**Education**

Educational requirements for Colorado's dental assistant include training in both radiography and nitrous oxide before those procedures can be performed. Similarly, California's DA must complete training in radiography prior to providing those services. However, California's DA cannot administer nitrous oxide.

## Dental Hygienists

Colorado's structure for the hygienists' scope of practice was designed to be open with few parameters and, accordingly, allows them to work within generally acceptable standards for the profession. Their practice area resides primarily within the traditional hygienist activities for which they obtain appropriate education and training. We compared the regulations related to California's registered dental hygienist (RDH) to Colorado's dental hygienist. During our comparison we noted similar duties. We also noted that some of duties designated for Colorado's hygienists are delineated in dental

assisting categories in California. As of March 2001, there were 3,251 dental hygiene active and retired licensees in Colorado.

California's dental hygienist provisions include a few duties not specified in Colorado's description of this category. However, with the broad definitions for the scope of practice, most of these activities are likely encompassed in the general allowable duty statement "*any dental task or procedure assigned to the hygienist by a licensed dentist that does not require the professional skill of a licensed dentist*" as long as they do not *"contribute to the irremediable alteration of the oral anatomy*." Further, Colorado does not specifically state that dental hygienists can perform all functions of the dental assistant, but since this category is unlicensed, logic suggests that these duties would fall within the hygienists' practice.

Additionally, the hygienist in Colorado is permitted to gather information and prepare study casts and certain other activities that are duties associated with the RDA and RDAEF in California. However, where DA and RDA duties are a part of the California dental hygienists' scope of practice, duties delineated for the RDAEF are not as this designation requires distinct education, training, examination and licensure.

**Supervision**

Colorado's statutes outline that most procedures of a dental hygienist must be performed under general supervision, except when administering local anesthetic or nitrous oxide, which must be performed under direct supervision. In addition, Colorado's dental hygienists may perform prophylaxis, curettage, apply fluorides and other topical agents (including anesthetic), and oral inspections without supervision. The general supervision and direct supervision requirements are similar to California. However, California does not permit RDHs to practice unsupervised and requires that curettage be performed under direct supervision.

**Education**

In terms of educational requirements, both states require that dental hygienists complete a dental hygiene program as well as a board examination. Colorado requires that hygienists obtain certification for nitrous oxide, local anesthetic, and radiography by taking a course in the three areas. California's dental hygienists are also must complete courses in the same three areas, but also require a course in soft tissue curettage, which is not required in Colorado.

## Dental Auxiliary Enforcement

Colorado's Board of Dental Examiners is charged with maintaining licenses and receiving complaints regarding dental hygienists. Dental assistants are not regulated in

Colorado, and board officials indicate that they have never received a complaint related to dental assistants. In regards to hygienists, officials stated that they receive about five complaints per year; however, these are typically from dentists, and do not recall receiving consumer complaints.

## Innovative Areas

Colorado's structure for regulating dental auxiliaries is innovative in a few areas. Colorado law allows auxiliaries to perform a broad scope of activities as long as these duties do not require the skill of a licensed dentist. Thus, the statutes accommodate shifts in technology and techniques without major regulatory changes. Moreover, dental auxiliaries may practice without many limitations within the prescribed boundaries. Additionally, the general prohibition statement of "*procedures that will contribute to or result in an irremediable alteration of the oral anatomy*" covers a variety of tasks without having to specifically identify every procedure in a list of prohibited duties. Both the allowable and prohibited general practice statements afford flexibility; thus, making the dentist responsible and allowing him or her to make the decisions on the procedures performed, how to deploy the auxiliaries in the office, and determine the appropriate supervision levels necessary in the circumstances.

Dental hygienists in Colorado are permitted to establish independent practices. There are no constraints regarding the settings or the level of service that they may perform.

## Public Health

Because Colorado dental hygienists are permitted to establish independent practices and there are no constraints as to the settings in which they perform, it is likely that they may fulfill many of the public health access needs of the state.

## Current Issues

The Colorado Board of Dental Examiners is currently conducting a sunrise review relative to regulating dental assistants. The intent behind the review is to determine whether dental assistants should be licensed and allowed to perform additional duties and have more responsibilities.

According to a representative of Colorado's Dental Assistant Association, dental assistants within the state would like licensure. The dental assistant association believes that many assistants perform duties that they do not have the training or skills to perform—thus, creating a public health issue. The association is currently working with the Legislature to establish minimum education requirements for assistants—infection control being a major component. However, the association does not believe that licensure will happen within Colorado because dentists would have to pay higher salaries

and there is already an assistant shortage within the state and licensure's barrier may exacerbate the problem.

Officials from Colorado's Department of Regulatory Agencies, under which the Board of Dental Examiners operates, indicated that the Dental Assistant Association has a membership of about 25 percent of the dental assistants in the state and that the dental assistants are requesting expanded duties in both direct and general supervision areas. This would include formal training to "restore teeth." Their proposal for licensure would allow them to do more things than they currently can legally perform.

# State of Minnesota

## Regulatory Structure

The duties, supervision levels, and educational requirements of Minnesota's dental auxiliaries are spelled out primarily in regulations (Minnesota Rules) with discussions of educational requirements in statutes (Minnesota Statutes). Minnesota has three categories of dental auxiliaries—dental assistants, registered dental assistants, and dental hygienists. In general, Minnesota's regulatory structure is closed or "permissive" and the rules set out a list of allowable duties—duties not listed are defined as prohibited. Although the dental assistants category is not licensed, the state provides an extensive listing delineating allowable duties for this occupation.

The general regulation sections related to allowable duties for Minnesota's dental auxiliaries are as follows:

- Dental Assistants—Minnesota Rules Chapter 3100, Section 8400
- Registered Dental Assistants—Minnesota Rules Chapter 3100, Section 8500
- Dental Hygienists—Minnesota Rules Chapter 3100, Section 8700

According to officials from the Minnesota Board of Dentistry, the prescriptive nature of the regulations has been in place since the 1960s. Minnesota was the first state to "register" a category of dental assistants, and the prescriptive list was established at that time.

In 1999, the Board of Dentistry considered changing the structure of the regulations to one that would be a mix of permissive and non-permissive, with the intent to allow more flexibility in the regulations and address changes in dental practice. This model would have included both a listing of allowable and prohibited duties rather than the existing "permissive structure" that includes all duties allowable. According to board officials, at the time, draft language was developed which delineated a short list of allowable duties along with a more extensive list of prohibited duties—yet the intent was not to make changes to the existing scope of practice. Board of Dentistry officials stated that, due to shifts in the board membership, the proposed regulatory changes did not go forward. Reasons stated included possible perceived confusion about allowable duties, difficulty in enforcement, and safety of new "unproven" therapies.

## Dental Assistants

We compared Minnesota's unlicensed category of dental assistant to California's unregistered dental assistant (DA) to determine whether the groups have similar duties. As illustrated in the table that follows, Minnesota's dental assistant category appears to

be more limited than California's DA in a variety of areas. It appears that all of the duties allowed for Minnesota's unlicensed dental assistant are allowed in California; however, we noted a number of duties specified for California's DAs are not included within Minnesota's scope of practice. In fact, many of these activities are delineated for it's registered dental assistant classification.

| Minnesota—Dental Assistant | California—Dental Assistant |
|---|---|
| Duties not directly related with performing dental treatment or services on patients | -Supportive dental procedures<br>-Extraoral duties or functions specified by the supervising dentists |
| Retract patient's cheek, tongue, or other tissue | Intraoral retraction and suction |
| Assist with placement and removal of rubber dam | Place and remove rubber dams |
| Remove debris with vacuum, compressed air, mouthwash, and water | Intraoral retraction and suction |
| Placement of articles and topical medication | -Apply non-aerosol and non-caustic topical agents<br>-Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH |
| Aid dental hygienists and registered dental assistants | Supportive dental procedures |

It is interesting to note that despite Minnesota's intent to be restrictive in the dental assistant's scope of practice, there are two provisions that appear to allow some latitude for the dentist to delegate non-specific tasks:

- Provide any assistance including the placement of articles and topical medication in the patient's oral cavity
- Aid dental hygienists and registered dental assistants in their duties

**Supervision**

Minnesota's dental assistant supervision provisions are very specific. Unlike most states that define supervision in broad terms such as general or direct, the provisions actually describe when and under what condition the duty may be undertaken. These provisions certainly fall within a definition of "direct supervision," but appear to be more restrictive than California's supervision requirements.

**Education**

There are no educational requirements for this category in Minnesota. California requires that DAs obtain certification in radiography; however, this is not a permitted assistant task in Minnesota.

## Registered Dental Assistant

We evaluated the allowable duties for Minnesota's registered dental assistant as compared to California's category of the same name. For purposes of our analysis, we considered two of California's two categories of DA and RDA, as reflected on the table that follows, as the duties of the RDA include those of the unregistered dental assistant.

| Minnesota—Registered Dental Assistant | California—Registered Dental Assistant or Dental Assistant |
|---|---|
| Cut arch wire | Remove arch wires—DA |
| Remove loose bands or brackets | -Removal of orthodontic bands<br>-Check for loose bands—DA<br>-Remove ligature ties—DA |
| Take radiographs | -Operation of dental radiographic equipment for the purpose of oral radiology—DA |
| Take impressions for casts and appropriate bite registration | Take bite registrations for diagnostic models for case study only |
| Apply topical agents that are physiologically reversible | -Apply non-aerosol and non-caustic topical agents—DA<br>-Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH—DA<br>-Apply bleaching agents with non-laser light-curing devices |
| Place and remove rubber dam | Place and remove rubber dams—DA |
| Remove excess cement | Remove excess cement from supragingival surfaces of teeth with a hand instrument or floss |
| Perform polishing to clinical crowns | Coronal polishing (with certification) |
| Place and remove periodontal dressings | -Placement of post-extraction and periodontal dressings<br>-Remove post-extraction and periodontal dressings—DA |
| Remove sutures | Remove sutures—DA |
| Monitor nitrous oxide patient | Assist in the administration of nitrous oxide analgesia or sedation—DA |
| Place and remove elastic orthodontic separators | -Placement of orthodontic separators<br>-Placement and removal of elastic orthodontic separators—DA |
| Remove and place ligature ties and arch wires | -Placement and ligation of arch wires<br>-Remove ligature ties—DA |
| Dry root canals with paper points | Dry canals, previously opened by the supervising dentist, with absorbent points |
| Place cotton pellets and temporary restorative materials into endodontic access openings | |
| Remove excess bond material | Remove excess cement from supragingival surfaces of teeth with a hand instrument or floss |
| Etch appropriate enamel surfaces before bonding | ** Duty of extended function RDA only |
| Etch appropriate enamel surfaces and apply pit and fissure sealants (with certification) | ** Duty of extended function RDA only |
| Make preliminary adaptation of temporary crowns | -Size stainless steel crowns, temporary crowns and bands<br>-Fabrication of temporary crowns intraorally |
| Remove temporary crowns | Temporary cementation and removal of temporary crowns and removal of orthodontic bands |

It appears that the registered dental assistants in Minnesota may provide primarily the standard dental assisting services, whereas California's RDAs have somewhat more latitude to conduct additional duties for which they are trained. Many of the duties allowed for registered dental assistants in Minnesota are defined for the unregistered dental assistant in California. However, unlike California, the registered dental assistant in Minnesota is permitted to etch and apply sealant after completing the necessary training—a duty that only California RDAEFs and registered dental hygienists (RDH) may perform.

**Supervision**

Minnesota's regulations specify that registered dental assistants work primarily under indirect supervision meaning that the dentist is in the office premises while the procedures are performed. Registered dental assistants may perform a few duties like cutting arch wires and removing loose bands or brackets under general supervision. The more advanced duties of etching, applying sealants, removing bond material, and crown-related procedures are required to be conducted under direct supervision. In contrast, the RDA in California works primarily under direct supervision.

**Education**

To become a registered dental assistant in Minnesota, candidates must successfully complete a dental assisting program as well as a clinical examination. California differs from Minnesota in the methods of gaining eligibility to take the required examination. California's RDAs may become eligible for the examination process by two methods—12 months of work experience or successfully completing a dental assisting program.

Different procedures require additional training and certification in the two states. In California, the procedure of coronal polishing requires certification, whereas Minnesota's dental assistants can perform polishing to clinical crowns without additional training or certification. Additionally, in Minnesota registered dental assistants may apply pit and fissure sealants if they obtain the appropriate certification that entails passing a course for that procedure; in California this function is only allowed to be performed by the RDAEF, which is an advanced certification requiring education, training, and examination above that required for the RDA designation.

## Dental Hygienists

We conducted an analysis of the regulations regarding the dental hygienist categories in Minnesota and California. For comparison, we also included duties typically performed by California's RDA as those duties are incorporated into the dental hygienist scope of practice. The practices in both states are fairly similar. We found most of the duties defined for Minnesota's dental hygienist are also found in California's descriptions.

However, a few of Minnesota's hygiene procedures are designated to the RDAs in California, but are incorporated into hygienists' duties by rule and thus automatically are a part of the dental hygienists scope of practice. Additionally, like California, dental hygienists can perform all activities of licensed and unlicensed dental assistants.

We identified three notable dissimilarities between Minnesota's duty statements and California rules and regulations for the various dental auxiliary categories. Minnesota's hygienists may specifically perform dietary analysis, salivary analysis, and preparation of smears for dental health purposes; and, remove excess bond material from *orthodontic appliances.* California's hygienists are allowed to perform soft tissue curettage after appropriate training and Minnesota's are not allowed to conduct this activity.

**Supervision**

Minnesota's regulations outline that the majority of dental hygiene procedures are performed under general supervision and must be carried out in accordance with the dentist's diagnosis and treatment plan. Administering nitrous oxide or doing work with temporary crowns requires direct dentist supervision. However, rules regarding the administration of local anesthetic and removal of marginal overhangs stipulates indirect supervision (requiring only that the dentist is in the office). California has similar provisions for hygienists allowing general supervision for the majority of activities, but like Minnesota, specifies direct supervision for administering local anesthetic and nitrous oxide.

**Education**

Educational requirements for dental hygienists in both states are very similar. Both Minnesota and California require that an applicant for licensure pass a dental hygiene educational program, then a national or board-approved examination. Additionally, both states require certification for nitrous oxide and local anesthetic that can be obtained by completing a course in the subject area.

## Dental Auxiliary Enforcement

The Minnesota Board of Dental Examiners is responsible for the enforcement of regulations within all three of the auxiliary categories. According to board staff, it receives very few complaints related to dental auxiliaries—the few complaints they receive each year typically relate to substance abuse or other staff reporting that someone is performing duties outside the appropriate scope of practice.

## Public Health

Minnesota Statutes (Chapter 150A, Section 10) define the settings and requirements for dental hygienists to work in public health. The statutes allow performing limited hygiene services independently and without a preliminary dental examination of the patient. Permitted services include complete prophylaxis, radiography, and preliminary charting. Hygienists can also provide sealants, but a dentist must first examine the patient.

Statutes also allow hygienists to be employed by health care facilities and provide the stipulated hygiene services to patients and residents of the facility. To work within the public health setting, the hygienist must have two years of experience completed within the proceeding five years and maintain a collaborative agreement with a licensed dentist—a written agreement with a licensed dentist who authorizes and accepts responsibility for the services performed by the dental hygienist.

## Current Issues

The Minnesota Board of Dental Examiners has recently taken up several issues related to scope of practice for auxiliaries. Since December 2001, the board has been looking into changing the regulatory structure over the practices to a mix of permissive and non-permissive language rather than the strict prescriptive model it has maintained since the 1960s. Currently, the board is in the process of researching the options available.

Additionally, the board proposed rule amendments that would allow registered dental assistants to perform some duties more autonomously. The concept behind this proposal is that allowing registered dental assistants to do more work independently would free up the dentists' time to perform more complex procedures. Other proposed amendments relate to dental hygienists and would designate certain restorative duties for this category rather than allowing hygienists to conduct all duties specified for registered dental assistants.

Moreover, the board recently rejected a proposal to create a "mid-level" dental hygienist that could practice in a more independent manner. Instead, the board supported the creation of advanced training for dental hygienists that would result in a certification for expanded functions. This certification would allow hygienists to work more independently and perform functions related to diagnosis and treatment planning for preventive oral care. According to board staff, the specifics have not yet been developed.

# State of New Mexico

## Regulatory Structure

New Mexico's regulatory structure is defined in both regulations and the statutes in terms of dental auxiliary duties, supervision, and education. New Mexico has three categories of dental auxiliaries—dental assistants certified in expanded functions, dental hygienists, and collaborative practice dental hygienists. Dental assistants obtaining certification through the Dental Assisting National Board are mentioned in statutes, but are not specifically defined in code or regulation. Rather, New Mexico's provisions address opportunities for dental assistants to become certified to perform certain expanded functions.

The New Mexico codes and regulations generally discuss allowable and prohibited duties for the auxiliary categories and are cited in the following:

- Dental Assistants Certified in Expanded Functions—New Mexico Administrative Code Title 16, Chapter 5, Section 39.9
- Dental Hygienists—Dental Health Care Act (New Mexico Statutes) Title 61, Article 5A, Section 4
- Collaborative Practice Dental Hygienist—New Mexico Administrative Code Title 16, Chapter 5, Section 17.11

The regulations and statutes related to dental auxiliaries in New Mexico appear fairly open and non-prescriptive. Statutes are silent regarding dental assistants scope of practice; however, provisions do delineate duties specified for certain "expanded functions." Additionally, the duties described for dental hygienists are included in the definition of the "practice of dental hygiene."

Officials from the New Mexico Board of Dental Health Care convey that regulations related to auxiliaries change often—usually yearly. They feel that due to the general terminology and mix of allowable and prohibited duties, there is still a lot of "gray area," that the board must address when questions arise. Most often, technology changes and innovations in techniques lead to the majority of the questions received regarding dental auxiliaries scope of practice within the overall dentistry umbrella.

## Dental Assistants Certified in Expanded Functions

Since regulations address only "expanded functions" for dental assistants, we performed a comparison of these specific duties for dental assistants in New Mexico with the duties of all categories of dental assistants in California.

| New Mexico—Dental Assistant Certified in Expanded Functions | California—All Dental Assistant Categories |
|---|---|
| Dental radiography (with certification) | Operation of dental radiographic equipment for the purpose of oral radiology—DA (with certification) |
| Rubber cup coronal polishing (with certification) | Coronal polishing—RDA (with certification) |
| Application of topical fluoride (with certification) | Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH—DA |
| Pit and fissure sealants (with certification) | ** |
| Basic supportive dental procedures | Supportive dental procedures—DA |

**May be performed only by Expanded Function Registered Dental Assistants and Dental Hygienists

New Mexico's regulations are silent regarding any other allowable dental assistant duties with the exception of those defined (as shown in the table) for expanded functions. While provisions do include a listing of prohibited duties—that fairly closely match California's prohibited activities—it appears that dental assistants in New Mexico may potentially perform many of the duties established for all three categories of dental assistants in California. However, the prohibited duties list could limit assistants in New Mexico from performing the some of the activities related to impressions that are defined for California's licensure category registered dental assistant in expanded functions (RDAEF).

The expanded functions delineated for specific certification of New Mexico dental assistants align with differing categories of California's dental assistants. Unregistered dental assistants (DA) in California can perform radiography and apply topical fluoride (when certified to do so) whereas only registered dental assistants (RDA) and RDAEFs can perform coronal polishing and sealants, respectively.

**Supervision**

New Mexico's code specifies that the dental assistant work under indirect supervision, meaning that the dentist must be in the office at the time of the procedure. This supervision specification differs from California where most dental assisting activities must be performed primarily under direct supervision. More similar to California is New Mexico's supervision requirement for "*basic supportive dental procedures*" where certain activities must be performed under direct dentist supervision.

**Education**

Educational requirements related to the activities defined for the expanded functions certifications in New Mexico differ from the criteria required to perform those duties in California. In New Mexico, the application of sealants requires extensive experience, 4,000 hours, and training as well as an examination before the dental assistant is

permitted to perform the procedure. Only RDAEFs in California are permitted to apply sealants and this designation requires an extensive educational program and passing a board examination, above the certification requirements of the RDA. Radiography, coronal polishing, and fluoride—require training and a board examination in New Mexico, whereas in California no training is required for fluoride—DAs are permitted to perform this duty. Further, in California a DA may conduct radiography only after completing a board certified course; however, only RDAs are permitted to perform coronal polishing and only after completing a board-approved course.

Officials from New Mexico's Board of Dental Health Care stated that, recently the certification requirements for coronal polishing and fluoride have been removed. However, published regulations do not yet reflect this change.

## Dental Hygienists

Statutes describe the duties of New Mexico's dental hygienist by defining the practice of dental hygiene. We analyzed California's registered dental hygienist in relation to the duties mentioned as the practice of dental hygiene in New Mexico and found, with a few exceptions, the listing of activities match fairly closely.

However, one provision in New Mexico's statutes specifies "*other closely related services*" for dental hygienists. This broad statement appears to open up the practice to allow flexibility in the provision of services provided they fall into the standard scope of hygiene practice. Thus, this open structure likely permits New Mexico's hygienists to perform more duties than those prescribed for California's hygiene category.

All of the duties stated in New Mexico's practice of dental hygiene are allowed to be performed by California's hygienists. One notable duty—administration of nitrous oxide—is not included in New Mexico's listing, and may be covered by the "*other closely related services"* provision; it is not clear. Like provisions for the dental assistant, New Mexico's delineation of prohibited duties are outlined in code and similar to those not in California.

### Supervision

The statutes in New Mexico state that all duties of the dental hygienist must be performed under general supervision. This differs slightly from California's requirements where provisions stipulate that soft tissue curettage and local anesthetic must both be performed under direct supervision.

**Education**

Educational requirements for New Mexico's dental hygienist are similar to those of the registered dental hygienist in California. Both must complete a dental hygiene educational program and pass an examination. Unlike California, the duty of removing diseased crevicular tissue (by means of soft tissue curettage in California) does not require certification before the procedure can be performed. Both states require that certification be obtained through coursework in local anesthesia and radiography. However, unlike California, New Mexico also requires a board-approved examination before these procedures can be performed.

## Collaborative Practice Dental Hygienist

Both California and New Mexico have a classification of dental hygienist that can provide services in an independent manner and establish an independent practice. While California's registered dental hygienist in alternative practice (RDHAP) is required to obtain a dentist's prescription to provide a variety of services, New Mexico's collaborative dental hygienist is required to maintain a "collaborative practice agreement" with a consulting dentist. The required collaborative practice agreement provides a "standing order" for basic preventive procedures including prophylaxis and radiography. Provisions require that all records must be forwarded to the consulting dentist and the hygienist must maintain regular contact with that dentist.

Further, unlike California, the New Mexico collaborative hygienist may perform many services based on the agreement rather than obtaining specific patient prescriptions. Like the RDHAP, the collaborative practice dental hygienist also must refer patients to the consulting dentist for regular examinations or more complex dental services.

New Mexico's regulations outline the services that a collaborative practice dental hygienist can perform and include:

- Review health history charting of existing teeth and restorations
- Periodontal charting
- Notation of potential pathology
- Dental radiography
- Prophylaxis/scaling
- Topical fluoride treatment

The collaborative practice dental hygienist provides basically the same services as the RDHAP in California. New Mexico's regulations also outline prohibited duties that are very similar to those in California for the RDHAP. Both the RDHAP and the collaborative practice dental hygienist are permitted to practice without dentist supervision for the procedures outlined.

New Mexico's regulations state that a dental hygienist with 2,400 hours of active practice within the prior 18 months is eligible to establish a collaborative practice. California's RDHAP is required to have fewer experience hours—2,000—but must also attend an educational program, and take a board examination.

## Dental Auxiliary Enforcement

The Board of Dental Health Care regulates all dentistry including dental assistants certified in expanded functions. However, dental hygiene has its own examining committee—the Dental Hygiene Committee—that oversees this practice area. According to Board of Dental Health Care staff, the committee has received some disciplinary complaints against dental hygienists and assistants. Staff characterized those complaints as consumer questions relative to the ability or eligibility of a hygienist or assistant to perform a certain duty. In New Mexico, allegations received by the board may lead to a formal complaint; discipline actions usually result in stipulation agreements.

## Innovative Areas

Innovation exists within New Mexico in its collaborative practice dental hygienist, which allows experienced hygienists to form an agreement with a dentist to provide services independently and with standing orders that are not specific to a patient.

## Public Health

The collaborative practice dental hygienist is permitted to establish an independent practice. The provisions related to this category of dental auxiliary allow for the hygienist to enter into a contractual agreement in any location or setting. This provides the opportunity to offer services independently in the public health arena.

Additionally, New Mexico's regulations (New Mexico Administrative Code Title 16, Chapter 5, Section 29.10) outline settings in which a dental hygienist can work including clinics, hospitals, nursing homes, and schools. The regulations state that the hygienist must have written authorization to perform services in these settings.

## Current Issues

The staff of the Board of Dental Health Care relayed that the collaborative practice dental hygienist provisions have been around since 2000. Currently, there are only 16 hygienists practicing within this category in the state. The intent of the collaborative practice is to address access to care issues revolving around basic preventive oral health care. Board officials believe that dental hygienists have found it difficult to arrange a

collaborative agreement with a consulting dentist. Additionally, existing federal regulations do not allow collaborative practice hygienists to be reimbursed by Medicaid—all claims must be submitted through the dentist's office.

# State of Oregon

## Regulatory Structure

Oregon regulates dental auxiliaries in a somewhat unique fashion. While like many other states the duties, supervision, and education are spelled in statutes (Oregon Revised Statutes) and regulations (Oregon Administrative Rules), Oregon's four categories of dental auxiliaries—dental assistants, expanded functions dental assistants, dental hygienists, and expanded functions dental hygienists—operate under fairly non-specific provisions. Generally, regulation sections regarding allowable and prohibited duties for all auxiliaries are as follows:

- Dental Assistants—Oregon Administrative Rules Chapter 818, Division 42, Sections 0050 and 0040
- Expanded Functions Dental Assistants—Oregon Administrative Rules Chapter 818, Division 42, Sections 0070 and 0090
- Dental Hygienists—Oregon Administrative Rules Chapter 818, Division 35, Sections 0020 and 0030
- Expanded Functions Dental Hygienists—Oregon Administrative Rules Chapter 818, Division 35, Section 0040

Allowable duties for dental assistants in Oregon are not specifically discussed in regulations; instead they practice under a "non-permissive" structure (specifying only those things not allowed) with provisions setting forth a list of prohibited duties. This model suggests an open and non-prescriptive approach to regulating dental assistants. Further, Oregon offers dental assistants opportunity to obtain an expanded functions designation, which allows them to perform a set of specified allowable duties. In general, the open and non-prescriptive nature of the regulatory structure in Oregon holds true for the other auxiliary categories with hygienist provisions somewhat more detailed in nature.

The expanded functions categories were created in the 1980s to allow more duties, but still require specific training under the caveat of potecting the welfare of the patient.

## Dental Assistants

Oregon's regulations related to dental assistants only specifically mention prohibited duties and one allowable duty that requires certification—exposure of radiographs. This suggests that dental assistants can perform a variety of duties in the dental office as long as they are not prohibited. Therefore, we analyzed Oregon's dental assistant in terms of not-allowed duties and compared that structure to the regulations related to California's unregistered (DA) and registered dental (RDA) assistants. Our analysis reveals that

generally, in considering the language of the practice and the prohibitions specifically outlined, it appears that Oregon's dental assistants may perform essentially the same duties of California's DA and RDA categories.

Officials from the Oregon Board of Dental Examiners stated that in 1997 a major shift occurred related to the scope of practice for dental assistants. The board decided that it could not list every allowable duty for the category and thus created a "non-permissive" regulatory model existing primarily of a listing of prohibited duties. Further, officials indicated that before moving to the current model, it received numerous questions regarding allowable duties and implementation of new technologies. Under the current model, the board indicated that these inquiries have greatly decreased.

**Supervision**

Oregon's regulations state that the activities of dental assistants occur under indirect supervision levels; this means that the dentist authorizes the procedure and is on the premises when the procedure is performed. This is more lenient than California's required direct supervision definition that specifies the dentist remain in the treatment room.

**Education**

While Oregon's dental assistant could potentially perform the majority of activities delineated for California's DA and RDA, the educational requirements are dissimilar. In both states there are no training or educational requirements for the unregistered dental assistant with the exception of radiography; both states mandate a certification before the assistant can do the procedure. However, it is important to note, that the unregistered dental assistant in Oregon is likely to perform the majority of tasks delineated for California's RDA that requires either 12 months experience or completion of a RDA educational course and successful passage of practical and written examinations.

## Expanded Function Dental Assistant

Oregon also has a second category for dental assistant—Expanded Function Dental Assistant (EFDA). We compared the duties set out for the EFDA to those allowed for California's RDAs and registered dental assistant in expanded functions (RDAEF). Both states permit the expanded function categories to perform all functions of the other dental assistants; therefore, our evaluation considered the duties of all categories of assistants.

For the most part, the duties set out for the EFDA may be conducted by the RDA in California. One duty—polishing amalgam restorations with a slow speed handpiece—is not specifically allowed for assistants in California. Further, due to the broad definitions afforded the scope of practice in Oregon, it is possible that EFDA and its dental assistants

alike could perform those functions established only for the RDAEF in California. However, one restriction prohibits Oregon's EFDA from placing any type of cord subgingivally, which is a task allowed for California's RDAEF category.

**Supervision**

As stated previously, Oregon's regulations require dental assistants to work under indirect supervision; this also pertains to the EFDA category. Specifically, the dentist must authorize and be on premises when the procedure is performed. California's RDAEF and RDA work under stricter supervision and must conduct the majority of their duties under direct supervision, which requires that the dentist be present in the room when the procedure is performed.

**Education**

Unlike California's RDAEF, the EFDA is not required to complete an expanded functions educational program. Oregon's EFDA must pass the Dental Assisting National Board's certified dental assistant and expanded function dental assistant examinations (or any equivalent examination). In addition, to qualify for the expanded function designation, dental assistants must obtain certification from a licensed dentist that they have completed the following tasks:

- Polished 12 amalgam surfaces
- Removed supragingival excess cement from six crowns and bridges with hand instruments
- Placed temporary restorative material in six teeth
- Preliminarily fitted six crowns to check contacts or to adjust occlusion
- Removed six temporary crowns for final cementation and cleaned teeth for final cementation
- Fabricated six temporary crowns and temporarily cemented crowns
- Polished coronal surfaces of teeth with a brush or rubber cup
- Placed two matrix bands in each quadrant

Like the assistant categories in California, the EFDA must complete a radiography course to perform these procedures. However, unlike California, the EFDA must complete additional courses and obtain appropriate certifications for applying sealants sealants and temporary relines. Only California's RDAEF category may conduct activities related to etchants and sealants and, while not requiring specific task certification, licensure in this category requires education, training, and examination over and above that for certification as an RDA.

## Other Areas of Expanded Functions

In addition to the EFDA certification, Oregon's regulations allow for certification of expanded functions in two specialty areas—orthodontics and oral surgery—rather than grouping those specialty functions into the general scope of the dental assistant.

The orthodontic assistant is allowed to remove cement from bands or brackets, recement bands, replace ligatures, and remove orthodontic appliances. Removing cement and recementing bands requires only that the dentist check the patient before and after the procedure. The other functions delineated may be performed when the dentist is not available provided that the patient is seen by the dentist as soon as is reasonably appropriate. Applicants for the certification must either complete a dental assisting program or pass the Dental Assisting National Board examination.

Expanded functions oral surgery assistants can administer medications into intravenous lines, emergency medications, and dispense medications prepared by the dentist. The first two duties require direct visual supervision while dispensing medications requires indirect supervision. To obtain the certification, the assistant must complete an examination and complete a health care provider and intravenous course.

California does not have similar specialty categories or certifications.

## Dental Hygienists

The functions and duties of dental hygienists are quite similar between Oregon and California. We compared the provisions regulating the dental hygiene categories both states and found that the vast majority of stated duties for the hygienists relate to traditional preventive and therapeutic activities. Further, both states permit hygienists to conduct dental assisting duties.

Officials from the Oregon Board of Dental Examiners stated, that in 2001, the board approved a listing of allowable duties for the dental hygienist. This list defines hygienists' duties and outlines what may be performed before the dentist sees a patient (including information gathering, probing, radiography, and prophylaxis). A dentist must examine the patient within 15 days of these procedures, or no further hygiene services can be provided. This shift was somewhat of a departure from the one made in 1997 for the dental assistant, which eliminated the list of allowable duties, but also afforded a change in the supervision structure allowing hygienists to treat patients before the dentist's examination.

Even when considering the recent changes, Oregon's practice of dental hygiene appears open and permits the hygienist much latitude to perform unscripted duties. The prohibited duties of Oregon's dental hygienist are almost identical to those delineated for California's category. Oregon has also established "expanded functions" for its

hygienists. These expanded functions are composed of four separate courses that allow dental hygienists to perform additional duties including applying local anesthetic, administering nitrous oxide, using high-speed handpieces, and applying temporary relines to dentures. California has a similar model in requiring separate courses for local anesthetic and nitrous oxide for their RDHs. The use of high-speed handpieces is not listed as an allowable function for any dental auxiliary in California.

**Supervision**

Similar to requirements set out for hygienists in California, Oregon's regulations state that most activities must be conducted under the general supervision of a dentist. Expanded functions that allow hygienists to administer local anesthetic and nitrous oxide must be performed under general and indirect supervision (approved by the dentist and the dentist is on the premises during the procedure) respectively, while California requires stricter direct supervision for both duties.

**Education**

Educational requirement for dental hygienists in California and Oregon are similar. Both require completion of a dental hygiene education program along with a board examination. However, California requires RDHs to complete a course in curettage before the procedure can be performed, but Oregon does not specify any additional training for this duty.

## Dental Auxiliary Enforcement

The Oregon Board of Dental Examiners is responsible for maintaining and enforcing dental auxiliary licenses and complaints. Officials from the Oregon Board of Dental Examiners stated that the board receives very few complaints related to dental auxiliaries. In terms of dental assistants, prior to 1997, the board received numerous calls regarding methods and technology that were not clear under the old regulations that listed both allowable and prohibited duties. Since the change to the broader regulatory model, the board has received minimal inquires, and has not received complaints from consumers.

## Innovative Areas

Oregon's regulations (Oregon Administrative Rules, Chapter 818, Division 35, Section 0020) allow dental hygienists to perform examination and prophylaxis duties prior to the patient being seen by a dentist. These provisions create greater opportunities for hygienists to provide care and increase potential for improving the public's access to care.

Additionally, Oregon's regulations (Oregon Administrative Rules, Chapter 818, Division 42, Sections 0100 and 0115) allow specialization of expanded functions dental assistants within the orthodontic and oral surgery specialties. Each designation has unique duties and requirements pertaining specifically to the distinctive fields of orthodontics and oral surgery.

## Public Health

Regulations provide two opportunities for dental hygienists to work in public health settings. Under Oregon Administrative Rules (Chapter 818, Division 35, Section 0020) dental hygienists may work in public health settings under the general supervision of a dentist. Settings include public institutions, health care facilities, or any place where limited access patients are located—patients who, due to age, infirmity, or disability are unable to receive care in a dental office. A dentist may also authorize a hygienist to perform hygiene services under general supervision on limited access patients, but the dentist must review the hygienist's findings.

However, hygienists may also obtain a Limited Access Permit. Regulations (Oregon Administrative Rules Chapter 818, Division 35, Section 0065) specify that a dental hygienist may obtain a Limited Access Permit if they have completed 5,000 hours of clinical practice within the last five years. The permit allows hygienist to provide hygiene services in public health settings without dentist supervision in settings such as nursing homes, adult foster homes, and residential care facilities.

## Current Issues

According to Oregon Board of Dental Examiners staff, the board addresses changes in technology proactively because board members maintain active practices and are aware of new technologies. These officials state that, usually, before the new technology or technique is widely in use within the dental community, the board has made a deliberative decision how to regulate it and taken the appropriate regulatory action.

# State of Pennsylvania

## Regulatory Structure

Pennsylvania's regulatory structure could be considered open. Its statutes and implementing regulations set few specifics in terms of duties and supervision of dental auxiliaries.

Pennsylvania has two defined categories of dental auxiliaries— expanded function dental assistants and dental hygienists. The definition of the expanded function dental assistant and prohibited duties for this classification are set out in Public Law 1361, Number 160. The scope of professional practice includes descriptions of prohibited duties and establishes allowable activities and supervision levels under regulations of the State Board of Dentistry (4a, Pennsylvania Code Chapter 33.205a.). Dental assistants within the state are not licensed and there are no laws or regulations specifically addressing the activities of this category. Duties for dental hygienists are described mainly in regulation (Regulations of the State Board of Dentistry, 4a, Pennsylvania Code Chapter 33.205) with statutes defining the practice and the general provisions regarding supervision and practice settings (Public Law 513, Number 118). Additionally, requirements for radiography regarding dental auxiliaries are outlined in a separate section of the regulation.

The Pennsylvania regulations over dental auxiliaries have been in their current form since 1995. Expanded function dental assistant provisions have been in law for several years, but related regulations have been in effect less than two years.

## Expanded Functions Dental Assistants

As mentioned above, the code and regulation is virtually silent in terms of dental assistants. The assumed role of the expanded function dental assistant is to establish certain assisting duties within the occupation that require training and education. Our comparison of the duties assigned to the expanded function dental assistant relates to all three of the dental assisting categories in California. However, in California's provisions, there are many tasks and areas prescribed as either allowable or prohibited that are not mentioned relative to Pennsylvania's expanded function dental assistant. Because Pennsylvania provisions are silent in terms of many dental assisting activities, it is likely that these are to be left to the discretion of the dentist to delegate and supervise.

When allowable duties for the expanded function dental assistant are analyzed in conjunction with prohibited duties, it appears that this dental auxiliary category has a broad scope of practice particularly in terms of restorative procedures. The prohibitions are mostly in advanced or other dental service areas.

| Pennsylvania—Expanded Functions Dental Assistant | California—Dental Assistant or Registered Dental Assistant |
|---|---|
| Placing and removing rubber dams | Place and remove rubber dams—DA |
| Placing and removing matrices | Place, wedge and remove matrices—DA |
| Placing and removing wedges | Place, wedge and remove matrices—DA |
| Applying cavity liners and bases | Place bases and liners on sound dentin—RDA |
| Placing and condensing amalgam restorations | |
| Carving and contouring amalgam restorations | |
| Placing and finishing composite resin restorations and/or sealant material or both | |
| Radiologic procedures | Operation of dental radiographic equipment for the purpose of oral radiology (with certification) |

The Pennsylvania regulations include the typical prohibitions related to diagnosis, cutting hard and soft tissue, and prescribing drugs. The other duties not allowable are limited to:

- Approving final occlusion
- Performing pulp capping, pulpotomy and other endodontic procedures
- Performing final placement/cementation of fixed and removable prosthetic appliances
- Administering local anesthesia, parenteral or inhalation sedation, nitrous oxide, or general anesthesia.
- Taking impressions other than for study models or diagnostic casts

Given the advanced nature of the majority of the allowable and prohibited duties, it is clear that the scope of practice for dental assisting in Pennsylvania is broad and far reaching.

**Supervision**

Pennsylvania regulation requires that all expanded function dental assistants perform their duties under direct supervision of the dentist. Direct supervision is not defined the same in Pennsylvania as in California, however. In Pennsylvania, direct supervision requires that the dentist be in the office, personally diagnose the condition to be treated, authorize the procedure, remain within the facility during the conduct of the activity, and review the work of the expanded function dental assistant prior to releasing the patient.

**Education**

The educational requirements for Pennsylvania's expanded function dental assistant exceed those required by the top-level dental assistant in California—the registered dental assistant in expanded functions (RDAEF). However, the entry into the practice is

more accessible than California's as courses may be offered in a variety different settings. The expanded function dental assistant must either complete a 200 hour expanded function course, graduate from a two-year college offering an extended function course, or graduate from a dental hygiene school that requires at least 74 hours in clinical or didactic instruction.

California's education requirement is a 150-hour course, offered in conjunction with a dental school—but only two programs are offered statewide. Like Pennsylvania, the program is oriented to restorative practices.

## Dental Hygienists

Pennsylvania law establishes a broad description of the practice of dental hygiene. Specifically, it describes the hygienist as:

> "*one who is legally licensed by the board to perform those educational, preventive, and therapeutic services and procedures that licensed dental hygienists have been educated to perform*."

| Pennsylvania—Dental Hygienist | California—Registered Dental Hygienist |
|---|---|
| Placement of antimicrobial cord | Placement of antimicrobial or antibiotic medicaments which do not later have to be removed (more restrictive than Pennsylvania) |
| Periodontal probing, scaling, root planning, polishing or another procedure required to remove calculus deposits, accretions, excess or flash restorative materials and stains from the exposed surfaces of the teeth and beneath the free margin of the gingival to the base of the junctional epithelium | -Removal of lime deposits, accretions, and stains from the unattached surface of the teeth<br>-Root planning<br>-Polish and contour restorations |
| Evaluation of the patient to collect data to identify dental hygiene care needs | Preliminary examination |
| The application of fluorides and other recognized topical agents for the prevention of oral diseases | -Irrigate subgingivally with an antimicrobial and/or antibiotic liquid solution<br>-Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH (allowed under DA) |
| Conditioning of teeth for and application of sealants | Apply pit and fissure sealants |
| Taking impressions of the teeth for athletic appliances | ** |
| Radiologic procedures (with certification) | Operation of dental radiographic equipment for the purpose of oral radiology (with certification) |

**May be performed only by Registered Dental Assistant/Hygienist in Expanded Functions

While the code sets out a scope of practice specifying duties included, language provides that these duties are not inclusive. Rather, it suggests that those activities not specified

are left to the discretion of the dentist to delegate and to determine the appropriate level of supervision.

Unlike California, the practice definitions for dental hygienists in Pennsylvania do not include prohibited duties. However, dentists are prohibited from delegating "*diagnosis, treatment planning, and writing prescriptions for drugs, or writing authorizations for restorative, prosthetic, or orthodontic appliances*." These prohibitions are fairly standard nationwide. Our analysis shows that the duties specifically delineated for Pennsylvania's hygienists are also allowed in California except placing antimicrobial cords, which is specifically prohibited in California. A few of the California duties are not addressed in Pennsylvania code.

California regulations over dental hygiene practices are prescriptive and include several duties that Pennsylvania's code does not address. However, elsewhere in the code we find mention of duties dentists may "supervise" such as anesthesia. Moreover, we also found that the Pennsylvania code has specific provisions that prohibit expanded functions dental assistants from conducting certain practices, thus establishing practice boundaries for that classification. Therefore it appears that the Pennsylvania law intends that hygienists perform duties and responsibilities comparable if not greater than those afforded under California regulation.

Furthermore, Pennsylvania code provides that:

> "*dental procedures shall be assigned to a competent person who the dentist deems appropriate as defined by and consistent with the act.*" Additionally, it states, "*licensed dentists may assign to their employed dental hygienists intraoral procedures which the hygienists have been educated to do that do not require the professional competence and skill of the employer-dentists*."

Thus, it appears that the code allows that the career progression, types of duties assigned, and level of supervision required for the practice of an individual dental hygienist is dictated by the education, skills and abilities of the hygienist and the employing dentist's perceived competency of that individual.

**Supervision**

In Pennsylvania, supervision over hygienists is left to the dentist; however, all services require some level of supervision. Whereas California supervision levels are classified by duty, Pennsylvania sets supervision levels based upon the health of the patient and level of duty. Generally, in the dentist's office most duties may be performed under general supervision with the exception of antimicrobial cord placement, which must be under dentist direct supervision. As stated above those duties not specified in code are supervised as deemed appropriate by the dentist.

**Education**

Like California, educational requirements for dental hygienists in Pennsylvania include completion of a dental hygiene educational program along with passage of an examination. Some other specific duties in California require separate certification obtained by completion of a specific course—procedures include anesthesia, nitrous oxide, curettage, and radiography. It does not appear that Pennsylvania requires any additional certification besides for radiography procedures.

## Dental Auxiliary Enforcement

Pennsylvania's Board of Dentistry is charged with overseeing the conduct of dentistry and related two auxiliaries licensed by the board. The board's legal charge and its mission are very similar to California. While our efforts to contact board staff to obtain information related to the level of complaints received relative to dental auxiliary members were unsuccessful, we did obtain discipline information from the Board of Dentistry's website. Of the 62 actions taken from July 1, 1998 to December 31, 2000, seven involved dental hygienists; five related to practicing on a lapsed license, one was a reprimand based upon an action taken in another state, and the last related to a criminal conviction related to controlled substances.

## Public Health

Pennsylvania law specifies practice settings for dental hygienists in three categories:

- Dental facilities
- Public or private institutions such as schools, hospitals, public health care agencies, nursing homes, mobile health units, and homes for juveniles, the elderly and the handicapped
- Institutions under federal, state, or local health agencies

Code further specifically prohibits any dental hygienist from practicing in independent practice of any kind—all services must be conducted in an office or workplace in which the supervision of a dentist is provided.

As such, it appears that Pennsylvania has established a similar structure as California in some respects; however, since only the supervision of a dentist is required, unlike California, Pennsylvania's public health settings and institutions can employ hygienists.

# State of Rhode Island

## Regulatory Structure

Rhode Island licenses only dentists and dental hygienists, although within law and regulation it recognizes dental assistants and certified dental assistants—as certificated by the Dental Assisting National Board (DANB), including those certified within certain oral healthcare specialties. The state's regulatory structure over dental auxiliaries is non-permissive and as a result quite open and discretionary. Basically, regulation stipulates that under the direction of the dentist:

> "*any reversible intra-oral procedure not specifically enumerated as delegatable or non-delegatable…may be delegated to any category of dental auxiliary (dental hygienist, certified dental assistant, and dental assistant), based on the discretion of the delegating dentist, the education and training and competency of the dental auxiliary*." (Rhode Island Rules and Regulations Part IV, Section 12.4)

## Dental Assistants

Although the dental assistant is not licensed or certified by the state, the laws and regulations recognizes them as members of the oral health care team. Regulations specify that a dental assistant may "*perform reversible intraoral procedures under the personal supervision of the dentist."* The rules go on to list a number of prohibited activities including those delineated for dental hygienist or considered irreversible intraoral procedures. These prohibitions are the same for all three categories of auxiliaries.

We find that California dental assistants also cannot perform the disallowed activities outlined for Rhode Island assistants. However, unlike California's narrowly defined role as established in prescribed allowed duties of the unlicensed dental assistant, with its non-permissive approach, Rhode Island affords a broad range of duties and activities that may be accomplished by the assistant when directed by the dentist.

### Supervision

All duties of a dental assistant in Rhode Island must be under the direct supervision of a dentist. Direct supervision carries a similar definition in both states.

**Education**

Laws and regulations are silent in Rhode Island relative to education or training required for the dental assistant. As such, this is similar to the structure in California. However, both states require formal training and certifications for exposure of radiographs.

## Certified Dental Assistants

Unlike California, Rhode Island does not examine or license any level of dental assistant; rather it recognizes the national credential for certified dental assistants. Although state laws and regulations cite certified dental assistants separate from dental assistants, the scope of responsibilities are virtually the same with the exception of two duties specified for the certified assistant. Under Rhode Island regulation, the certified dental assistant "*may perform reversible intraoral procedures under the direct supervision of the dentist."* Further, rules stipulate that the certified assistant may apply pit and fissure sealants and fluoride treatments provided that the assistant's certification course included such procedures or that the individual completed the appropriate courses.

As mentioned in the dental assistant discussion, under its non-permissive structure, Rhode Island sets out a number of prohibitions related to auxiliary members. With a few minor exceptions, California's categories of dental assistants also may not conduct those activities.

Although California's regulations set out numerous allowed activities for its three categories of dental assistants it appears that the flexibility afforded within the Rhode Island model for both levels of its dental assistant likely to comprise a scope of practice far exceeding California's and sets the delegation authority in the hands of the dentist.

**Supervision**

The supervision level for the certified dental assistant, like the dental assistant, is direct. California's regulatory structure is more lenient in this regard as many duties are classified as general for its registered dental assistants and registered dental assistants in expanded function—which are separately licensed by the California Dental Board.

**Education**

While California's educational standards for dental assisting credentialing are not precisely the same as the DANB certification there is not a notable disparity for purposes of our analysis.

## Dental Hygienists

According to the Rhode Island Department of Health, the state has approximately 750 active dental hygienists—nearly the same number as active licensed dentists. Rhode Island law defines the practice of dental hygiene as:

> "*those services and procedures that a dental hygienist has been educated to perform and which services are, from time to time, specifically authorized by the rules and regulations adopted by the Board of Examiners in Dentistry*."

Although code establishes the regulatory authority over hygienist activity, few specific control provisions exist.

Rhode Island regulations include some permissive language in discussing hygiene practices—"*dental hygienists may remove calculus, accretions and stains from both supragingival and subgingival tooth surfaces by scaling and root planning*," and continues on to encompass the duties of both the dental assistant and certified dental assistant. The listing of prohibited duties applies to all dental auxiliary categories but includes a few activities allowable for dental hygienists in California:

- Surgical procedures on hard or soft tissue—with the appropriate certification, California hygienists can perform soft tissue curettage.
- Administering injectable anesthetics—California hygienists can administer local anesthetics with appropriate training.
- Administering inhalants or inhalation conscious sedation agents with appropriate training.

The Rhode Island model for hygienists is quite similar to the model currently under consideration by the California Legislature. Where some differences do exist, the spirit and the intent appear to be the same: maxizing the skills and competencies of the dental hygienist for delivery of preventive and therapeutic oral health care.

**Supervision**

Dental hygienists may practice under the general supervision of the dentist. General supervision in Rhode Island appears much the same as California—the dentist must diagnose and prescribe treatment, but is not required to be on the premise when the hygienist performs the procedures.

**Education**

Dental hygienists in Rhode Island, like California are required to graduate from an accredited hygiene program and complete a board-approved examination. Rhode Island has not established other categories of hygienist.

## Dental Auxiliary Enforcement

The Rhode Island Board of Examiners in Dentistry is responsible for monitoring its licensees and receiving complaints. We were unable to obtain specific information related to complaint and enforcement activities.

## Innovative Areas

Rhode Island's non-permissive regulatory model for its auxiliaries could be considered innovative as it allows significant practice flexibility and establishes few barriers for professional development. Moreover, by describing the scope of practice for each category in terms of knowledge and skill, the regulations do not unduly restrict the delegation of activities while still maintaining responsibility and accountability. Also, the non-permissive approach accommodates changes and innovations in therapies and techniques while maintaining the authority to construct barriers where deemed appropriate.

Additionally, Rhode Island regulations clearly require, in fact stated in more than one section, training for infection control. Specifically, regulations state:

> "*All dentists and dental auxiliary personnel practicing in a dental setting shall receive annual training on and shall comply with the Occupational Safety and Health Administration's Bloodborne Pathogen Standards in order to protect themselves against occupational exposure to bloodborne pathogens."*

## Public Health

Although not specifically addressing public health needs or delivery systems, regulations provide that hygienists may practice under the employ of "*any licensed dentist, public institution or school authority*" as long as activities are "*confined to dental services, procedures/duties that a licensed hygienist…has been educated to perform…."* However, the provisions still retain the supervision requirements specified for general dental hygiene practice.

# State of Washington

## Regulatory Structure

The structure in place in Washington is a mix of permissive and non-permissive provisions. Both in state law and regulation, the practice definitions and duties include not only prescriptive detail but also broad and flexible provisions. Dental assistants per se are not directly defined but regulation sets parameters relative to "acts that may be performed by unlicensed persons." However, some provisions do mention "dental assistants," thus suggesting a recognized dental health care category. Washington establishes dental hygiene in much the same way as California's registered dental hygienist (RDH) provisions—with allowed duties, supervision levels, and prohibited acts. Basic laws and regulations over the two categories remain relatively unchanged in Washington since the 1980s.

## Unlicensed Persons (Dental Assistants)

Although unregulated and not defined as a career category, Washington code includes extensive listing of allowable duties for unlicensed persons. While the language states "a dentist may allow" these delineated acts, it is unclear if these provisions are intended to be permissive—that is permitting only these tasks to be delegated—or by also having the prohibited acts listing is suggesting that the intent is to also allow duties not listed and thus the permitted acts listing would not be inclusive—setting up a more "non-permissive" structure. Unlicensed persons are specifically allowed to perform general dental assisting skills such as oral inspection, history and education, but also many of the duties that are designated only for the advanced assistant categories in California. As the following table illustrates, while many of the duties align with California's unregulated dental assistant (DA), others such as removing excess cement and fabricating temporary crowns, requires that the assistant be a registered dental assistant (RDA) and services such as coronal polishing and sealants require California's RDA to obtain specific practice certifications.

| Washington—Unlicensed Person | California—Dental Assistant or Registered Dental Assistant |
|---|---|
| Oral inspection | Supportive dental procedures |
| Education in oral hygiene | Extraoral duties or functions specified by the supervising dentists |
| Place and remove rubber dam | Place and remove rubber dams |
| Hold in place and remove impression materials | Take impressions for diagnostic and opposing models, bleaching trays, temporary crowns, bridges, support guards |
| Take impressions for models and study casts | Take impressions for diagnostic and opposing models, bleaching trays, temporary crowns, bridges, support guards |
| Remove excess cement | Remove excess cement from supragingival surfaces of teeth with a hand instrument or floss—RDA |

| Washington—Unlicensed Person | California—Dental Assistant or Registered Dental Assistant |
|---|---|
| Perform coronal polishing | Coronal polishing—RDA |
| Give fluoride treatments | Apply topical fluoride, after scaling and polishing by the supervising dentist or RDH |
| Place periodontal packs | Placement of post-extraction and periodontal dressings—RDA |
| Remove periodontal packs and sutures | -Remove post-extraction and periodontal dressings<br>-Remove sutures |
| Place matrix and wedge | Place, wedge and remove matrices |
| Place temporary filing | |
| Apply tooth separators | Placement and removal of elastic orthodontic separators |
| Fabricate, place, and remove temporary crowns and bridges | -Fabrication of temporary crowns intraorally—RDA<br>-Temporary cementation and removal of temporary crowns and removal of orthodontic bands—RDA |
| Pack and medicate extraction areas | Placement of post-extraction and periodontal dressings—RDA |
| Deliver sedative drug capsule | |
| Place topical anesthetic | Apply non-aerosol and non-caustic topical agents |
| Place retraction cord | Cord retraction of gingivae for impression procedures—RDAEF |
| Polish restorations | *Polish and contour restorations—RDH category |
| Select denture shade and mold | |
| Acid etch | ** |
| Apply sealants | ** |
| Radiographs | Operation of dental radiographic equipment for the purpose of oral radiology (with certification) |
| Take health histories | Extraoral duties or functions specified by the supervising dentists |
| Record blood pressure and vital signs | Extraoral duties or functions specified by the supervising dentists |
| Give pre and postoperative instructions | Extraoral duties or functions specified by the supervising dentists |
| Assist in nitrous oxide | Assist in the administration of nitrous oxide analgesia or sedation |
| Select orthodontic band size | Size stainless steel crowns, temporary crowns and bands |
| Place and remove orthodontic separators | Placement and removal of elastic orthodontic separators |
| Prepare teeth for bonding | ** |
| Fit and adjust headgear | Seat adjustment retainers or headgears |
| Remove fixed orthodontic appliances | |
| Remove and replace arch wires | -Remove arch wires<br>-Placement and ligation of arch wires—RDA |
| Take facebow transfer for study casts | |
| Select shade of crowns | |

**May be performed only by Registered Dental Assistant/Hygienist in Expanded Functions

Moreover, a few duties allowed in Washington may only be performed by California's registered dental assistant in expanded functions (RDAEF). Others appear to be outside the scope of practice for all dental assistants allowed in California:

- Acid etch (not restricted to sealants)
- Placing temporary fillings
- Remove fixed orthodontic appliances
- Take facebow transfers for study

In comparing the allowed duties, it is important to note that some of the duty statements included in Washington's code and regulation are generally stated and may allow additional duties when determined by the supervising dentist.

Washington's listing of prohibited activities is more extensive than those specified for California—which is reasonable since California's structure is by nature "permissive" and if the duty isn't stated the auxiliary may not perform it. In Washington, unlicensed persons are specifically not allowed to place permanent restorations or crowns; perform oral prophylaxis (with the exception of coronal polishing); endodontic treatments; or certain procedures related to dentures; this is similar to all three ranges of California's assistants.

**Supervision**

Regulation specifies that unlicensed persons must operate under the "dentist's close supervision." Close supervision is defined as performing procedures on a patient the dentist has already personally diagnosed and authorized the treatment. The dentist must be "*physically present in the treatment facility while procedures are performed. Close supervision does not require a dentist to be physically present in the operatory; however, an attending dentist must be in the treatment facility and be capable of responding immediately in the event of an emergency*." This provision is far more lenient than the supervisory requirements in California.

**Education**

Although California does not specify any educational requirements for its DA category, the two licensed categories require significant formal education and clinical training. Washington requires no formal education or training for its dental assistants or "unlicensed persons." Most notably, no requirements exist for formal training or education related to three activities typically requiring specific coursework in many states:

- Coronal polishing
- Etching and pit and fissure sealants
- Radiography

## Dental Hygienists

The preventive and therapeutic aspects of dental assisting in Washington are quite similar to California's. However, unlike California, hygienists in Washington may place, carve, contour, and adjust restorations. Moreover, Washington code allows that hygienists "*may perform other dental operations and services delegated to them by a licensed dentist*" with four stated prohibitions—surgical removal of tissue, prescription of drugs, diagnosis, and taking specified impressions.

Taking both code and regulation into consideration, Washington's regulatory structure is more flexible and discretionary than California's structure. The duties specified in code and regulation in both states are fairly similar with the most notable differences being specific restorative work and the open-ended duty delegation by dentists found in Washington's provisions.

### Supervision

Two levels of supervision are specified in Washington for hygienists—general and close. General means "*supervision of dental procedures based on examination and diagnosis of the patient and subsequent instructions given by a licensed dentist, but not requiring the physical presence of the supervising dentist in the treatment facility during the performance of those duties."* Most activities of the hygienist fall within the general category.

Close supervision, as we detailed in the prior discussion, is required for four specified procedures:

1. Soft tissue curettage
2. Injection of local anesthetic
3. Placing restorations
4. Administering nitrous oxide

Generally these supervision levels align with those established for California's hygienists.

### Education

The educational requirements for licensure in Washington are similar to those found in most states. However, dental hygienists in Washington are not required to take certificate courses in curettage, radiography, local anesthetic, or nitrous oxide—duties commonly requiring specific training in California and elsewhere. Staff we spoke to from

Washington's Dental Quality Assurance Committee indicated that since these procedures require close supervision and are specified requirements of board-approved dental hygiene school curriculum, additional certifications and training are not warranted.

## Dental Auxiliary Enforcement

There are two boards that have responsibilities relative to dental auxiliary activities in Washington. The Dental Quality Assurance Committee is the primary oversight and monitoring entity and regulates all dentistry. The Dental Hygiene Examination Committee is responsible for licensure of hygienists including activities for education and examination approval.

Staff from the committees stated that it receives very few complaints related to assistants or hygienists; but, when they do, most relate to improper supervision and working outside scope of practice.

## Innovative Areas

While not stating the intent as such, the open regulatory structure in place in Washington affords much discretion and flexibility in leveraging the services of dental auxiliaries. Thus, the state has accommodated technologies and therapeutic changes by generally defining duties and responsibilities; leaving oral health care delivery to the assessment of the supervising dentist.

## Public Health

Intended to address the preventive oral health care of "*low income, rural, and other at-risk populations,*" in 2000, the Washington Legislature enacted a public health sealant program. It provides that a dental hygienist (licensed in the state as of April 19, 2001) "*may assess for and apply sealants and apply fluoride varnishes in community-based sealant programs carried out in schools*…" This program expands to low income, rural and other at-risk populations through coordination with local public health jurisdictions and local oral health coalitions once hygienists become "endorsed" through a health care school sealant program.

Moreover, other provisions allow hygienists to be employed in health care facilities. To be eligible for employment or retention in health care facilities, hygienists must have two years practical clinical experience with a licensed dentist within the previous five years. In these settings they may perform "*authorized dental hygiene operations and services without dental supervision…"* Practices are limited to:

- Removal of deposit and stains from tooth surface

- Application of topical preventive or prophylactic agents
- Polishing and smoothing restorations
- Performance of root planning
- Soft tissue curettage

Hygienists in these facilities may not administer anesthetic agents or nitrous oxide, or diagnose dental treatment. The definition of health care facilities is broad (through stated as "limited to") hospitals, nursing homes, home health care agencies, group homes (elderly, handicapped, and juvenile), some correctional facilities, federal, state, and local public health facilities and those that are state and federally funded (community, migrant health centers, and tribal clinics).

## Current Issues

Although the school sealant program was enacted in 2000, the committee staff stated that it is still in the process of developing specific rules for implementing the program.